U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

PB-255 144

TEMPERATURE OF MISSOURI STREAMS

GEOLOGICAL SURVEY

PREPARED FOR
MISSOURI GEOLOGICAL SURVEY AND
WATER RESOURCES

1971

BIBLIOGRAPHIC DATA SHEET	1. Report No.	2.	3. Recipient's Accession No. PB-255 144

4. Title and Subtitle
Temperature of Missouri Streams

5. Report Date
1971

6.

7. Author(s)
James E. Bowie

8. Performing Organization Rept. No.

9. Performing Organization Name and Address
Geological Survey, Rolla, Mo.
Water Resources Div.

10. Project/Task/Work Unit No.

11. Contract/Grant No.

12. Sponsoring Organization Name and Address
Missouri Geological Survey and Water Resources, Rolla

13. Type of Report & Period Covered

14.

15. Supplementary Notes

16. Abstracts

Temperature is one of the more important parameters in determining water quality. The purpose of this report is to compile and make available the temperature data of Missouri streams.

17. Key Words and Document Analysis. 17a. Descriptors

*Missouri,
*Streams,
*River basins,
*Water quality,

Rivers,
Inland waterways,
Waterways(watercourses),
Temperature,
Tables(Data).

17b. Identifiers/Open-Ended Terms

17c. COSATI Field Group 8 H

18. Availability Statement
National Technical Information Service
Springfield, Va.

19. Security Class (This Report)
UNCLASSIFIED

20. Security Class (This Page
UNCLASSIFIED

21. No. of Pages
354

22. Price
$10.50/$2.25

PB 255 144

TEMPERATURE OF MISSOURI STREAMS

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

PREPARED IN COOPERATION WITH THE
MISSOURI GEOLOGICAL SURVEY & WATER RESOURCES
MISSOURI WATER POLLUTION BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

TEMPERATURE OF MISSOURI STREAMS

by

James E. Bowie

U.S. Geological Survey, Water Resources Division

Prepared in cooperation
with the
Missouri Geological Survey and Water Resources
Missouri Water Pollution Board
United States Environmental Protection Agency

1971

CONTENTS

	Page
Purpose and scope	1
Cooperation and acknowledgments	2
Significance of temperature	2
Collection of data	4
Accuracy of data	4
Presentation of data	4
Observed variations	7
Alphabetical index of station names	11
Records of temperature and discharge	(downstream order)

TEMPERATURE OF MISSOURI STREAMS

By James E. Bowie

PURPOSE AND SCOPE

Temperature is one of the more important parameters in determining water quality. The purpose of this report is to compile and make available the temperature data of Missouri streams.

The U.S. Geological Survey has collected streamflow and water-quality information in Missouri for many years as a part of the program to investigate and appraise the State's water resources. This program has been in cooperation with the Missouri Geological Survey and Water Resources, and other local, State and Federal agencies. The stream temperature data collected as part of the water-quality program are published in the U.S. Geological Survey Water-Supply Papers "Quality of Surface Waters of the United States" from 1941 through 1963, and thereafter in the annual report "Water Resources Data for Missouri, Part. 2 Water Quality Records."

Much of the data on stream temperature obtained at time of discharge measurement have not been previously published. All continuous records are summarized in this report, and data for all sites having 10 or more occasional temperatures are included. The temperature of water usually varies throughout the day, and time of day of the temperature observation is given so that the user may evaluate the observation with the diurnal change expected during the day. The stream discharges at the time of temperature observations are given to aid the user in determining the quantity - temperature relation of water.

COOPERATION AND ACKNOWLEDGMENTS

This report was made possible by the financial assistance of the Missouri Geological Survey and Water Resources, Dr. W. C. Hayes, State Geologist and Director, the Missouri Water Pollution Board, Mr. Jack K. Smith, Executive Secretary, and the Environmental Protection Agency, Region VII, Mr. Jerome H. Svore, Regional Administrator. It was prepared in the Missouri district of the Water Resources Division, U. S. Geological Survey, under the direction of Mr. Anthony Homyk, Jr., District Chief.

SIGNIFICANCE OF TEMPERATURE

The physical, chemical, and biological properties of water are closely related to its temperature. Thus, the temperature is an important environmental factor that influences sediment transport, rate of chemical reactions, and biological processes. For example, water temperature influences the amount of dissolved oxygen, which is necessary to the aquatic organisms that stabilize organic matter in water. The solubility of oxygen in water becomes lower as the temperature rises. An increase in water temperature may increase the oxygen demand by killing bacteria and other biota which then become a part of the organic load and degrade the water's taste, color, and appearance.

The temperature of water is important in industry, particularly where most water use is for cooling. Many industrial operations desire a water of nearly constant temperature. Changes in temperature due to recirculation of water used in industrial processes or for air conditioning may limit the water's usefulness to others.

Water temperature is also important to wildlife conservation because temperature influences the saturation of water with oxygen from the air. Various species of fishes have different tolerances to oxygen content as well as to deviations in water temperature.

The water-quality standards adopted by the Missouri Water Pollution Board, and approved by the Secretary of the Interior in compliance with the Water Quality Act of 1965, are given in a series of river-basin publications by the Missouri Water Pollution Board. The temperature criteria give the maximum stream temperature that shall not be exceeded due to effluents, and limits the elevation or depression of average cross-sectional temperature of the stream due to effluents. The maximum temperature allowed varies by basins throughout the State.

COLLECTION OF DATA

The thermograph data were obtained from a sensing element set at a fixed elevation in the stream attached to analog recorder, or with a Ryan submersible thermograph at a fixed elevation. The depth of the observation for these records varies according to stage of the stream. Temperature data for water-quality monitor are measured by a sensing probe mounted in a flow-through chamber.

The temperature observations at the time of the discharge measurements were made at irregular intervals varying with the frequency of the discharge measurement. These temperature observations were made by immersing a thermometer in the stream, and the observations were usually made in moving water near the surface.

ACCURACY OF DATA

The continuous ethyl alcohol-actuated thermograph is accurate to plus or minus 2°F. The sensing element for the water-quality monitors is accurate to plus or minus 1°F. The thermometers used for determining the water temperature are accurate to plus or minus 0.5°F.

PRESENTATION OF DATA

Records are compiled in a downstream direction along the main stem and are identified by a nationwide identification number. The numbers have been assigned in the same downstream order used since 1950 in the annual series of U.S. Geological Survey Water-Supply Papers entitled "Surface Water Supply of the United States." Gaps are left in the numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete number of each station, such as 07-0130.00, includes the part (basin) number and a six-digit station number. In this report, the part number and only the essential digits of the station number are shown. For example, the complete number 07-0130.00 would appear as 7-0130, just to the left of the station name. The index of station names is alphabetical to assist user in determining downstream order number.

Temperature is reported in degrees Fahrenheit, and the maximum observed temperature is given in the manuscript description for each station. The Director of the U.S. Geological Survey approved the change from degrees Fahrenheit to degrees Celsius (centigrade) for reporting temperature on October 1, 1967. This change was made as a move toward use of metric system in all scientific studies by the Survey. A conversion table for converting degrees Fahrenheit to degrees Celsius is shown for the user's convenience. (See table 1).

The drainage area is given in square miles. Discharge is reported in cubic feet per second (cfs). Additional discharge data for the reported sites are available in U.S. Geological Survey Water-Supply Papers through September 1960, and "Water Resources Data for Missouri, Part 1. Surface Water Records" from October 1960 through September 1969, which are available from the U.S. Geological Survey, Water Resources Division, Rolla, Mo.

Table 1.--Temperature conversion table

°F	°C	°F	°C	°F	°C
32	0	55	13	78	26
33	1	56	13	79	26
34	1	57	14	80	27
35	2	58	14	81	27
36	2	59	15	82	28
37	3	60	16	83	28
38	3	61	16	84	29
39	4	62	17	85	29
40	4	63	17	86	30
41	5	64	18	87	31
42	6	65	18	88	31
43	6	66	19	89	32
44	7	67	19	90	32
45	7	68	20	91	33
46	8	69	21	92	33
47	8	70	21	93	34
48	9	71	22	94	34
49	9	72	22	95	35
50	10	73	23	96	36
51	11	74	23	97	36
52	11	75	24	98	37
53	12	76	24	99	37
54	12	77	25	100	38

OBSERVED VARIATIONS

The temperatures of Missouri streams vary widely with geographical location; generally the streams in north Missouri have higher summer temperatures and are frozen for longer periods during the cold months of the year than streams in other parts of the State. This geographical difference in water temperature is accentuated by the source and quantity of flow and the geometry of the stream channels. The streams of north Missouri have a low base flow from ground-water discharge and generally flow in a shallow stream channel in unconsolidated glacial drift or alluvial fill. The rapid, clear-flowing streams of south Missouri have a high base flow with most deriving their flow from large springs which have relatively constant temperatures. This, and their more deeply incised channels, tend to make stream temperatures less variable than in other areas of the State.

The water-quality standards criteria set 90°F as the stream temperature that shall not be exceeded due to effluents in all river basins of the State except certain streams in the White River basin, which was set at 80°F. On some small streams or in highly developed areas other criteria were set. The following streams listed by downstream order numbers have temperature measurements higher than their respective water-quality standard criteria for temperature. These temperatures are considered to be from natural conditions and not due to effluent, except for the James River near Nixa, 7-0507.5.

Station name	Downstream order number	Maximum temperature measured (°F)
Wyaconda River above Canton--------	5-4960	91
North Fabius River at Memphis------	5-4969.5	91
North Fabius River at Monticello---	5-4970	92
South Fabius River near Taylor-----	5-5000	95
North River at Palmyra-------------	5-5010	92
Bear Creek at Hannibal-------------	5-5020	93
South Fork Salt River near Santa Fe	5-5049	91
Salt River near Monroe City--------	5-5075	92
Salt River near New London---------	5-5080	92
Spencer Creek near Frankford-------	5-5088	91
North Fork Cuivre River at Silex---	5-5143	91
Tarkio River at Fairfax------------	6-8130	93
Little Tarkio Creek near Mound City	6-8155.7	91
Nodaway River near Burlington Junction.	6-8175	93
One Hundred and Two River near Maryville.	6-8195	91
Platte River near Agency-----------	6-8205	91
Jenkins Branch at Gower------------	6-8210	93
Blue River near Kansas City--------	6-8935	96
East Fork Fishing River at Excelsior Springs.	6-8945	96
Wakenda Creek at Carrollton--------	6-8960	93
Middle Fork Grand River at Grant City.	6-8961.85	94
Grand River near Darlington--------	6-8965.5	91

Station name	Downstream order number	Maximum temperature measured (°F)
East Fork Big Creek near Bethany---	6-8970	95
Weldon River near Mercer-----------	6-8985	92
Weldon River at Mill Grove---------	6-8990	97
Thompson River at Trenton----------	6-8995	93
Medicine Creek near Galt-----------	6-9000	98
Locust Creek near Linneus----------	6-9015	98
Chariton River at Novinger---------	6-9045	91
Blackwater River at Valley City----	6-9077	91
Blackwater River at Blue Lick------	6-9080	95
Moreau River near Jefferson City---	6-9105	91
Marmaton River near Nevada---------	6-9180.6	92
Sac River near Stockton------------	6-9190	92
South Grand River at Urich---------	6-9216	91
Big Creek at Blairstown------------	6-9217.2	93
Mississippi River at Chester, Ill.	7-0205	91
Mississippi River at Thebes, Ill.	7-0220	91
Little River ditch 81 near Kennett	7-0410	93
Little River ditch 1 near Kennett--	7-0420	97
James River near Nixa--------------	7-0507.5	100
North Fork River at Twin Bridges---	7-0574	82
Black River near Annapolis---------	7-0615	83
Menorkenut Slough near Qulin-------	7-0631.3	92
Current River at Van Buren---------	7-0670	81
Current River at Doniphan----------	7-0680	81

Station name	Downstream order number	Maximum temperature measured (°F)
Spring River at Thayer-------------	7-0691.5	81
Spring River at Larussell----------	7-1857	93

ALPHABETICAL INDEX OF STATION NAMES

Station name	Downstream order number
Apple Creek at Appleton	7-0206
Barnes Creek near Fredericktown	7-0355
Bear Creek at Hannibal	5-5020
Beaver Creek at Kissee Mills	7-0541.5
Beaver Creek near Rolla	6-9310
Beeler Branch near Cabool	6-9287
Bennett Bayou at Bakersfield	7-0589
Big Buffalo Creek near Stover	6-9228
Big Creek at Blairstown	6-9217.2
Big Creek at Chloride	7-0369.4
Big Creek near Yukon	7-0645
Big Hollow near Fulton	6-9272
Big Piney River near Big Piney	6-9300
Big River at Byrnesville	7-0185
Big River at Irondale	7-0172
Big River near Bonne Terre	7-0176
Big River near DeSoto	7-0180
Big River near Richwoods	7-0181
Black River near Annapolis	7-0615
Black River at Leeper	7-0625
Black River at Poplar Bluff	7-0630
Blackwater River at Blue Lick	6-9080
Blackwater River at Valley City	6-9077
Blue River at State Line in Southwest Kansas City	6-8931

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Blue River on 63rd St. in Kansas City	6-8935.3
Blue River near Kansas City	6-8935
Bourbeuse River at Union	7-0165
Bourbeuse River near High Gate	7-0157.2
Bourbeuse River near St. James	7-0150
Bourbeuse River near Owensville	7-0157.5
Bourbeuse River near Spring Bluff	7-0160
Bridge Creek Branch near Baring	5-4977
Brushy Creek near Blairstown	6-9217.4
Bryant Creek near Tecumseh	7-0580
Buffalo Creek at Tiff City	7-1891
Bull Creek at Walnut Shade	7-0538
Burge Branch near Arrow Rock	6-9066
Calumet Creek near Clarksville	5-5097
Capps Creek near Berwick	7-1868
Castor River at Aquilla	7-0430
Castor River at Zalma	7-0210
Cedar Creek near Columbia	6-9104.1
Cedar Creek near Pleasant View	6-9195
Center Creek near Carl Junction	7-1864.6
Center Creek near Carterville	7-1864
Center Creek near Fidelity	7-1862
Center Creek near Sarcoxie	7-1861

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Chariton River at Livonia	6-9040.5
Chariton River at Novinger	6-9045
Chariton River near Prairie Hill	6-9055
Chub Creek near Lincoln	6-9227
Clark Creek near Piedmont	7-0377
Coldwater Creek near St. Louis	6-9365
Courtois Creek at Berryman	7-0142
Coyle Branch at Houston	6-9290
Crooked River near Richmond	6-8950
Cuivre River near Troy	5-5145
Current River at Doniphan	7-0680
Current River at Round Spring	7-0649.5
Current River at Van Buren	7-0670
Current River near Eminence	7-0665
Des Moines River at St. Francisville	5-4906
Dry Branch near Bonne Terre	7-0175
East Fork Big Creek near Bethany	6-8970
East Fork Black River at Lesterville	7-0613
East Fork Black River near Lesterville	7-0612
East Fork Chariton River near Huntsville	6-9063
East Fork Fishing River at Excelsior Springs	6-8945
East Yellow Creek near Brookfield	6-9029
Eleven Point River near Bardley	7-0715
Eleven Point River near Thomasville	7-0705

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Elk Fork Salt River near Paris	5-5070
Elk River at Pineville	7-1888.5
Elk River near Tiff City	7-1890
Finley Creek at Riverdale	7-0523.4
Finley Creek near Ozark	7-0523
Flat Creek at Cassville	7-0527.5
Flat Creek at Jenkins	7-0528
Flat Creek near Sedalia	6-9067
Fox River at Wayland	5-4950
Gasconade River at Jerome	6-9335
Gasconade River near Hazlegreen	6-9280
Gasconade River near Nebo	6-9277
Gasconade River near Rich Fountain	6-9340
Gasconade River near Waynesville	6-9285
Grand River at Chillicothe	6-8996.8
Grand River near Grant City	6-8961.6
Grand River near Darlington	6-8965.5
Grand River near Gallatin	6-8975
Grand River near Pattonsburg	6-8969
Grand River near Stanberry	6-8961.7
Grand River near Sumner	6-9020
Gravois Creek near Kirkwood	7-0101
Grove Creek near Scotland	7-1862.5
Hamilton Branch near New Boston	6-9025
Headwater Diversion Channel at Allenville	7-0218

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Hickory Creek at Neosho	7-1869
Hinkson Creek at Columbia	6-9102.3
Huzzah Creek at Dillard	7-0131
Huzzah Creek near Steelville	7-0140
Indian Creek at Anderson	7-1888.7
Indian Creek at State Line in Southwest Kansas City	6-8934
Jacks Fork at Eminence	7-0660
Jacks Fork near Mountain View	7-0652
James River at Galena	7-0525
James River west of Nixa	7-0522
James River near Boaz	7-0522.5
James River near Nixa	7-0507.5
James River near Springfield	7-0507
James River near Wilson Creek	7-0510.2
Jenkins Branch at Gower	6-8210
Joachim Creek at Hematite	7-0190.5
Lamine River at Clifton City	6-9070
Laquey Branch near Hazlegreen	6-9282
Lindley Creek near Polk	6-9212
Little Beaver Creek near Rolla	6-9315
Little Black River near Fairdealing	7-0685
Little Blue River at Longview Road in Kansas City	6-8937.9
Little Blue River near Lake City	6-8940
Little Piney Creek at Newburg	6-9320

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Little Platte River at Smithville	6-8211.5
Little River ditch 1 near Kennett	7-0420
Little River ditch 1 near Morehouse	7-0435
Little River ditch 66 near Kennett	7-0450
Little River ditch 81 near Kennett	7-0410
Little River ditch 251 near Kennett	7-0440
Little River ditch 251 near Lilbourn	7-0425
Little River ditch 259 near Kennett	7-0460
Little Sac River at Aldrich	6-9188
Little Sac River near Morrisville	6-9187.4
Little St. Francis River at Fredericktown	7-0350
Little Sugar Creek at Caverna	7-1888.2
Little Tarkio Creek near Mound City	6-8155.7
Locust Creek near Linneus	6-9015
Logan Creek at Ellington	7-0619
Lost Creek at Elsberry	5-5135
Lost Creek at Seneca	7-1885
Loutre River at Mineola	6-9355
Maries River at Westphalia	6-9270
Marmaton River near Nevada	6-9180.6
McKenzie Creek near Piedmont	7-0621
Medicine Creek near Galt	6-9000
Menorkenut Slough near Qulin	7-0631.3
Meramec River at Cook Station	7-0103.5

ALPHABETICAL INDEX OF STATION NAMES--continued

Station names	Downstream order number
Meramec River at Paulina Hills	7-0190.45
Meramec River at Robertsville	7-0170
Meramec River near Eureka	7-0190
Meramec River near Steelville	7-0130
Meramec River near Sullivan	7-0145
Middle Fabius River near Baring	5-4975
Middle Fabius River near Monticello	5-4980
Middle Fork Black River near Lesterville	7-0611.7
Middle Fork Chariton River below Salisbury	6-9064.7
Middle Fork Grand River at Grant City	6-8961.85
Middle Fork Salt River at Paris	5-5065
Mill Creek at Oregon	6-8160
Mineral Fork near Potosi	7-0178
Mississippi River at Alton, Ill	5-5875
Mississippi River at Chester, Ill	7-0205
Mississippi River at St. Louis	7-0100
Mississippi River at Thebes, Ill	7-0220
Missouri River at Boonville	6-9090
Missouri River at Hermann	6-9345
Missouri River at Kansas City	6-8930
Missouri River at St. Joseph	6-8180
Missouri River at Waverly	6-8955
Moniteau Creek near Fayette	6-9095

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Moreau River near Jefferson City	6-9105
Mussel Fork near Musselfork	6-9060
Niangua River at Marshfield	6-9230
Niangua River near Decaturville	6-9240
Nodaway River near Burlington Junction	6-8175
Nodaway River near Oregon	6-8178
North Fabius River at Memphis	5-4969.5
North Fabius River at Monticello	5-4970
North Fork Cuivre River at Silex	5-5143
North Fork River at Twin Bridges	7-0574
North Fork River near Tecumseh	7-0575
North River at Bethel	5-5005
North River at Palmyra	5-5010
Oak Grove Branch near Brighton	6-9187
Old Mines Creek near Potosi	7-0179
One Hundred and Two River near Maryville	6-8195
Osage Fork at Drynob	6-9278
Osage River at Osceola	6-9205
Osage River at Warsaw	6-9225
Osage River near Bagnell	6-9260
Osage River at Rich Hill	6-9166.5
Osage River near St. Thomas	6-9265
Osage River near Schell City	6-9180.8
Petite Saline Creek near Boonville	6-9100

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Petite Saline Creek tributary near Bellair	6-9097
Platte River at Platte City	6-8212
Platte River at Ravenwood	6-8189
Platte River near Agency	6-8205
Plattin Creek at Plattin	7-0190.9
Pomme de Terre River at Hermitage	6-9215
Pomme de Terre River near Avery	6-9215.4
Pomme de Terre River near Bolivar	6-9210
Pomme de Terre River near Hermitage	6-9213.5
Pomme de Terre River near Polk	6-9210.7
Rock Creek at Independence	6-8936
Rock Creek below Seckman	7-0190.3
Roubidoux Creek at Waynesville	6-9284.5
Sac River near Dadeville	6-9184.4
Sac River near Stockton	6-9190
St. Francis River at Wappapello	7-0395
St. Francis River near Patterson	7-0375
St. Francis River near Roselle	7-0340
Salt River at Hagers Grove	5-5023
Salt River near Monroe City	5-5075
Salt River near New London	5-5080
Salt River near Shelbina	5-5025

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Sandy Creek near Pevely	7-0190.7
Shoal Creek above Joplin	7-1870
Shoal Creek at Neosho	7-1868.9
Shoal Creek at Ritchey	7-1868.8
Shoal Creek near Braymer	6-8997
Shoal Creek near Fairview	7-1867
Sinking Creek near Round Spring	7-0648
South Fabius River near Taylor	5-5000
South Fork Blackwater River near Elm	6-9075
South Fork Salt River at Mexico	5-5044
South Fork Salt River near Santa Fe	5-5049
South Grand River at Urich	6-9216
South Grand River near Brownington	6-9220
Spencer Creek near Frankford	5-5088
Spring Creek at Twin Bridges	7-0574.5
Spring River at Carthage	7-1857.6
Spring River at Larussell	7-1857
Spring River near Stotts City	7-1856.5
Spring River at Thayer	7-0691.5
Spring River near Waco	7-1860
Stahl Creek near Miller	7-1855
Starks Creek at Preston	6-9252
Swan Creek at Forsyth	7-0539.8

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Tarkio River at Fairfax	6-8130
Thompson Branch near Albany	6-8965
Thompson River at Mt. Moriah	6-8981
Thompson River at Trenton	6-8995
Turkey Creek near Joplin	7-1866
Turnback Creek above Greenfield	6-9184.6
Van Cleve Branch near Meta	6-9262
Wakenda Creek at Carrollton	6-8960
Weldon River near Mercer	6-8985
Weldon River at Mill Grove	6-8990
Weldon River near Trenton	6-8991
West Fork Black River at Centerville	7-0611.5
West Yellow Creek near Brookfield	6-9022
White Cloud Creek near Maryville	6-8200
White River at Forsyth	7-0540
White River near Branson	7-0535
White River near Reeds Spring	7-0530
Whitewater River at Millersville	7-0214
Wilson Creek below Springfield	7-0521.5
Wilson Creek near Battlefield	7-0521.6
Wolf Creek near Farmington	7-0330
Wyaconda River above Canton	5-4960

ALPHABETICAL INDEX OF STATION NAMES--continued

Station name	Downstream order number
Yellow Creek near Rothville	6-9030
Youngs Creek near Mexico	5-5060

DES MOINES RIVER BASIN

5-4906. Des Moines River at St. Francisville, Mo.

Location.--Lat 40°27'45", long 91°34'00", Clark County, at St. Francisville, and 8 miles upstream from Sugar Creek.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 23, 1967	1725	79	1,320				
Sept. 20, 1967	1520	75	1,150				
Oct. 17, 1967	1640	57	3,500				
Nov. 9, 1967	1030	44	1,270				
Mar. 6, 1968	1130	38	---				
Apr. 9, 1968	1415	60	---				
May 7, 1968	1310	57	1,920				
June 18, 1968	1500	79	1,350				
July 9, 1968	1445	81	4,100				
Aug. 6, 1968	--	88	2,090				
Sept. 19, 1968	0900	59	---				
Oct. 17, 1968	0900	61	---				
Nov. 21, 1968	1115	37	4,920				
Dec. 12, 1968	0930	41	2,010				
Jan. 23, 1969	0945	33	---				
Feb. 19, 1969	1520	33	---				
Mar. 13, 1969	0930	33	3,850				
Apr. 10, 1969	0930	46	32,500				
May 8, 1969	0915	62	9,500				
June 19, 1969	0930	69	18,300				
July 31, 1969	1530	80	19,200				
Aug. 26, 1969	0910	76	17,800				
Sept. 30, 1969	1030	65	3,280				

FOX RIVER BASIN

5-4950. Fox River at Wayland, Mo.

Location.--Lat 40°23'45", long 91°35'50", in NW¼ sec.31, T.65 N., R.6 W., on left bank 90 feet downstream from bridge on U. S. Highway 136, three-quarters of a mile west of Wayland, and 5 miles downstream from Brush Creek.

Drainage area.--400 sq mi, approximately. Area at site used prior to Oct. 1, 1929, 392 sq mi.

Discharge records available.--February 1922 to September 1969. Published as "near Wayland" prior to October 1929.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 25, 1946	1340	64	50.3
June 8, 1946	1615	80	19.8
July 11, 1946	1215	87	18.2
Aug. 16, 1946	0900	74	33.5
Sept. 20, 1946	1350	72	5.83
Oct. 25, 1946	1145	59	15.0
Dec. 5, 1946	0810	37	13.3
Feb. 6, 1947	1445	32	38.1
Mar. 13, 1947	0845	35	70.2
Apr. 14, 1947	0700	54	240
May 16, 1947	0720	68	73.0
July 24, 1947	0920	70	14.2
Sept. 12, 1947	0845	73	2.82
Oct. 15, 1947	1625	75	2.84
Jan. 15, 1948	0815	33	77.9
Mar. 27, 1948	0830	52	230
Apr. 30, 1948	0830	60	81.4
June 4, 1948	0905	73	8.23
July 10, 1948	0810	79	40.0
Aug. 12, 1948	1430	79	13.0
Sept. 10, 1948	1235	61	124
Oct. 8, 1948	1235	55	207
Nov. 6, 1948	1145	59	49.1
Dec. 4, 1948	1715	40	21.3
Jan. 6, 1949	1155	36	223
Feb. 3, 1949	1120	40	61.8
Apr. 9, 1949	1200	53	100
May 6, 1949	1415	81	42.5
July 8, 1949	1200	79	224
Aug. 13, 1949	1150	77	77.5
Sept. 8, 1949	1750	68	2.32
Oct. 11, 1949	1710	62	4.76
Dec. 7, 1949	0830	36	2.79
Jan. 14, 1950	0850	33	1,300
May 3, 1950	1310	64	125
May 31, 1950	0930	67	54.3
June 28, 1950	0940	80	67.1
Aug. 2, 1950	1420	76	9.24
Sept. 7, 1950	1425	72	4.52
Oct. 4, 1950	1700	62	1.59
Nov. 10, 1950	1050	34	2.55
Dec. 6, 1950	1415	32	3.10
Jan. 10, 1951	1355	32	1.99
Mar. 7, 1951	1440	39	63.9
Apr. 5, 1951	1145	40	301
May 2, 1951	1335	68	104
May 16, 1951	0900	68	122
June 6, 1951	1030	63	25.5
July 11, 1951	1300	77	41.3
Oct. 4, 1951	1250	65	7.37
Dec. 1, 1951	1020	45	36.0
Dec, 5, 1951	0910	41	48.9
May 10, 1952	1640	57	167
Oct. 7, 1952	1600	52	0
Dec. 3, 1952	1250	34	16.4
Dec. 13, 1952	1600	46	3.93
Jan. 7, 1953	0930	33	11
Feb. 11, 1953	1745	33	1,590
June 2, 1953	1535	84	20.9
Sept. 10, 1953	1340	71	.17
Dec. 2, 1953	0925	44	.26
Jan. 6, 1954	1410	37	.61
Feb. 3, 1954	0945	34	.49
Mar. 3, 1954	1230	35	2.83
Mar. 31, 1954	1715	41	11.7
June 10, 1954	0930	72	34.9
July 8, 1954	0850	68	2.11
July 10, 1954	0810	74	1.82
Aug 12, 1954	1250	70	2.30
Sept. 15, 1954	0915	72	.37
Nov. 11, 1954	0845	47	9.07
Dec. 10, 1954	1030	33	8.25
Jan. 10, 1955	1225	32	167
Jan. 26, 1955	0950	33	24.7
Mar. 23, 1955	1455	43	68.0
Apr. 20, 1955	0835	72	84.7
May 18, 1955	1600	70	90.3
June 16, 1955	1345	74	17.3
Sept. 15, 1955	0950	70	.15
Oct. 12, 1955	1300	66	4.77
Nov. 16, 1955	0955	34	.41
Dec. 14, 1955	0830	32	.31
Jan. 10, 1956	1715	34	.85
Feb. 7, 1956	1635	36	1.72
Feb. 29, 1956	0915	36	50.4
May 22, 1956	1350	74	.23
June 19, 1956	1300	77	.05
May 8, 1957	0815	63	17.1
Dec. 4, 1957	1035	32	15.0
June 18, 1958	1000	66	138
Aug. 27, 1958	1240	77	55.6
Dec. 3, 1958	1530	37	45.2
Jan. 7, 1959	1015	32	13.0
Apr. 29, 1959	1520	68	387
June 11, 1959	0900	80	43.8
Nov. 18, 1959	1010	41	24.8
Feb. 11, 1960	1530	31	690
July 16, 1960	1750	78	128
Dec. 21, 1960	0950	36	2.93
Feb. 1, 1961	1330	33	1.99
Feb. 15, 1961	0935	35	247
Mar. 17, 1961	0850	35	187
Apr. 5, 1961	0620	50	65.6
May 3, 1961	1455	62	60.2
Sept. 25, 1961	0800	63	28.3
June 13, 1961	1435	75	10.8
July 13, 1961	0935	74	5.18
Aug. 9, 1961	1255	82	6.28
Sept. 7, 1961	1120	78	1.65
Oct. 5, 1961	1315	60	76.4
Nov. 29, 1961	1700	38	124
Jan. 10, 1962	1050	33	175
Jan. 16, 1962	0850	32	100
Feb. 2, 1962	1425	33	218
Mar. 8, 1962	1120	32	97.2
Apr. 3, 1962	1030	40	143
May 3, 1962	1140	52	60.8
June 6, 1962	1330	72	96.3
Aug. 9, 1962	1115	62	25.2
Sept. 6, 1962	1525	73	1.26
Oct. 4, 1962	0855	58	135
Oct. 24, 1962	1100	47	62.9
Jan. 10, 1963	0650	33	10.4
Feb. 18, 1963	1435	34	28.6
Mar. 8, 1963	1105	40	413
Mar. 22, 1963	0815	38	178
Apr. 3, 1963	0925	51	224
May 8, 1963	0950	72	31.8
May 14, 1963	1130	70	116
June 5, 1963	0855	85	14.8
July 11, 1963	0835	74	5.90
July 23, 1963	0730	74	14.2

FOX RIVER BASIN

Temperature and Discharge of Fox River at Wayland, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 7, 1963	1020	85	.76
Aug. 19, 1963	1055	65	3.80
Sept. 5, 1963	1035	79	5.24
Sept. 18, 1963	1620	75	1.40
Oct. 4, 1963	1045	68	.22
Oct. 17, 1963	1440	68	.25
Nov. 6, 1963	1405	53	.14
Nov. 14, 1963	1020	43	.43
Dec. 4, 1963	1415	37	2.30
Dec. 12, 1963	1110	33	2.90
Jan. 15, 1964	1450	38	.90
Jan. 21, 1964	1515	34	1.28
Feb. 5, 1964	1040	33	4.90
Feb. 20, 1964	0850	33	7.20
Mar. 5, 1964	1235	36	37.4
Mar. 17, 1964	1010	42	14.8
Apr. 1, 1964	1050	45	20.1
Apr. 21, 1964	1650	60	6,040
May 12, 1964	0940	68	27.6
June 2, 1964	1310	71	6.30
July 8, 1964	1430	79	9.90
Aug. 6, 1964	1115	86	2.70
Sept. 3, 1964	1150	79	1.90
Oct. 7, 1964	1600	57	1.10
Nov. 4, 1964	1325	65	.80
Dec. 2, 1964	1525	33	5.40
Jan. 7, 1965	1300	40	75.7
Feb. 3, 1965	1440	33	16.7
Mar. 10, 1965	1035	34	149
May 5, 1965	0735	70	73.5
June 3, 1965	1500	73	28.1
July 7, 1965	1350	76	1,160
Aug. 5, 1965	0615	76	3.7
Sept. 2, 1965	1525	73	63.8
Oct. 6, 1965	0935	56	29.1
Nov. 2, 1965	1440	52	12.1
Dec. 8, 1965	1240	37	16.0
Jan. 6, 1966	0920	32	47.8
Mar. 2, 1966	1400	37	26.7
Apr. 11, 1966	1635	45	25.4
May 26, 1966	0840	66	108
July 11, 1966	1215	89	6.90
Aug. 3, 1966	1645	81	22.0
Sept. 6, 1966	1235	72	.77
Oct. 5, 1966	1250	63	.89
Nov. 8, 1966	0930	52	2.90
Dec. 7, 1966	1205	39	6.90
Jan. 23, 1967	1340	36	3.70
Mar. 7, 1967	1620	34	60.4
Apr. 10, 1967	1455	58	502
May 1, 1967	1510	65	21.7
June 5, 1967	1415	69	102
July 10, 1967	1520	86	28.8
Aug. 2, 1967	1745	82	42.1
Aug. 23, 1967	1600	77	8.00
Sept. 11, 1967	1330	69	2.40
Sept. 20, 1967	1400	73	10.0
Oct. 9, 1967	1350	58	294
Oct. 17, 1967	1520	58	332
Nov. 9, 1967	0900	50	123
Dec. 4, 1967	1435	35	45.7
Feb. 8, 1968	1045	34	68.7
Mar. 6, 1968	0830	35	37.0
Mar. 12, 1968	1215	41	59.4
Apr. 1, 1968	1400	53	964
Apr. 9, 1968	1245	58	108
Apr. 29, 1968	1640	67	147
May 7, 1968	1500	60	51.0
May 8, 1968	0800	62	25.0
June 3, 1968	1505	83	44.6
June 18, 1968	1345	76	12.0
July 9, 1968	1300	82	4.90
July 10, 1968	1420	80	3.90
Aug. 6, 1968	1315	88	6.60
Aug. 22, 1968	1745	90	1.74
Sept. 18, 1968	0945	62	6.20
Sept. 18, 1968	1715	62	25.0
Oct. 29, 1968	0930	41	2.49
Nov. 21, 1968	0940	34	19.0
Nov. 22, 1968	1025	36	16.3
Dec. 3, 1968	1300	39	118
Dec. 12, 1968	1045	37	76.0
Jan. 23, 1969	0820	33	3,660
Feb. 19, 1969	1650	34	1.08
Mar. 13, 1969	1100	34	133
Apr. 7, 1969	1255	57	133
Apr. 10, 1969	1100	58	82.0
Apr. 23, 1969	1645	59	144
May 8, 1969	1015	62	640
May 14, 1969	1515	62	173
June 3, 1969	1050	58	64.4
June 16, 1969	1545	72	16.3
June 19, 1969	0830	72	8.82
July 31, 1969	1655	82	15.0
Aug. 6, 1969	0815	75	18.2
Aug. 26, 1969	1040	72	17.5
Sept. 3, 1969	0910	72	4.74
Sept. 30, 1969	0915	86	14.0

WYACONDA RIVER BASIN

5-4960. Wyaconda River above Canton, Mo.

Location.--Lat 40°08'30", long 91°33'55", in SE¼ sec.28, T.62 N., R.6 W., on left bank on downstream side of bridge on State Highway 16, 1 mile upstream from Sugar Creek, and 2 miles west of Canton.

Drainage area.--393 sq mi.

Discharge records available.--October 1932 to September 1969.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 15, 1945	0715	74	5.30	Apr. 19, 1955	1610	64	73.8
Sept. 19, 1945	1610	76	7.20	May 18, 1955	1015	60	94.9
Apr. 26, 1946	0750	60	49.0	June 16, 1955	0650	65	16.4
June 8, 1946	1300	78	10.0	Aug. 16, 1955	1340	80	.40
July 10, 1946	1655	86	16.0	Oct. 12, 1955	1040	65	10.4
Aug. 16, 1946	1130	76	52.5	Nov. 15, 1955	1515	46	2.94
Sept. 20, 1946	0755	66	7.23	Dec. 13, 1955	1250	34	1.00
Oct. 25, 1946	1425	58	14.4	Jan. 10, 1956	1515	34	1.16
Dec. 4, 1946	1220	36	9.30	Feb. 7, 1956	1225	38	.70
Jan. 3, 1947	1340	29	11.4	Apr. 25, 1956	1115	44	.38
Feb. 6, 1947	0710	32	41.2	May 22, 1956	1120	69	.41
Mar. 12, 1947	1025	38	40.4	Aug. 16, 1956	0925	70	69.0
Apr. 15, 1947	0645	55	154	Jan. 8, 1957	1145	40	.72
May 15, 1947	0810	68	35.5	May 8, 1957	1315	73	8.58
Sept. 11, 1947	0745	79	1.02	Jan. 9, 1958	1225	33	31.1
Oct. 16, 1947	0655	65	4.44	June 18, 1958	1650	72	126
Nov. 19, 1947	1430	45	57.3	Dec. 3, 1958	1150	38	46.6
Jan. 14 1948	1210	33	88.0	Jan. 6, 1959	1325	32	16.6
Apr. 29, 1948	1720	67	76.1	June 11, 1959	1750	80	30.0
June 3, 1948	1430	87	6.61	Nov. 17, 1959	1240	41	19.8
July 9, 1948	0830	82	69.5	Feb. 11, 1960	1340	32	941
Sept. 10, 1948	1520	69	162	July 15, 1960	1340	74	584
Oct. 8, 1948	1010	56	91.2	Dec. 21, 1960	1410	36	2.78
Nov. 6, 1948	1345	54	50.5	Jan. 11, 1961	1540	33	4.43
Jan. 7, 1949	0905	34	128	Feb. 2, 1961	0935	32	1.36
Feb. 3, 1949	0855	33	39.8	Feb. 15, 1961	1100	35	248
Apr. 9, 1949	1100	47	91.3	Apr. 3, 1961	1815	47	67.9
May 6, 1949	1120	77	30.6	May 3, 1961	1800	61	65.0
July 7, 1949	1600	81	103	May 19, 1961	1200	62	61.7
Aug. 12, 1949	1045	82	24.2	June 15, 1961	0905	76	8.22
Sept. 8, 1949	0940	70	3.72	July 14, 1961	0930	74	16.0
Oct. 11, 1949	1045	63	3.38	Aug. 9, 1961	1630	82	6.77
Dec. 6, 1949	1535	41	3.47	Sept. 7, 1961	1340	75	8.33
May 2, 1950	1730	54	88.8	Sept. 14, 1961	1350	70	2,830
May 30, 1950	1350	70	51.5	Sept. 16, 1961	0845	61	3,170
June 27, 1950	1325	80	65.9	Oct. 5, 1961	1550	61	66.9
Aug. 2, 1950	1010	76	8.28	Oct. 10, 1961	1435	60	32.6
Sept. 7, 1950	1015	72	5.16	Jan. 10, 1962	1415	33	141
Oct. 4, 1950	1425	62	3.55	Jan. 16, 1962	1430	33	76.4
Nov. 9, 1950	1215	34	3.13	Feb. 9, 1962	0825	33	108
Dec. 6, 1950	1200	32	2.60	Mar. 7, 1962	0900	32	93.0
Mar. 7, 1951	1155	36	65.0	Apr. 3, 1962	1340	46	129
May 2, 1951	1025	68	90.4	June 7, 1962	1310	75	62.0
July 11, 1951	0915	76	18.8	July 24, 1962	0950	72	27.7
Aug. 8, 1951	1400	85	10.2	Aug. 21, 1962	0945	77	7.28
Oct. 4, 1951	0825	62	5.02	Sept. 12, 1962	0945	70	9.91
Dec. 4, 1951	1610	46	39.4	Oct. 5, 1962	0755	59	124
Feb. 5, 1952	1200	32	64.0	Oct. 16, 1962	1055	66	9.61
Oct. 7, 1952	1415	52	0	Oct. 25, 1962	1150	43	33.0
Nov. 13, 1952	1330	43	.93	Nov. 30, 1962	0920	37	12.1
Dec. 3, 1952	0830	39	5.42	Dec. 11, 1962	1140	33	4.52
Jan. 7, 1953	1130	33	5.94	Jan. 9, 1963	1330	33	6.80
Feb. 11, 1953	0910	39	160	Jan. 21, 1963	1345	33	2.52
June 2, 1953	1220	84	17.1	Feb. 7, 1963	1540	33	71.1
July 7, 1953	1535	81	13.4	Feb. 20, 1963	1340	33	20.8
Dec. 1, 1953	1310	40	.01	Mar. 9, 1963	0930	38	295
Jan. 7, 1954	1630	36	.23	Mar. 21, 1963	1100	39	273
Feb. 2, 1954	1615	34	.03	Apr. 3, 1963	1215	57	238
Mar. 3, 1954	1525	37	2.2	May 8, 1963	1500	77	20.7
Apr. 1, 1954	0850	39	10.5	June 5, 1963	1105	85	7.17
July 7, 1954	1515	91	.84	June 18, 1963	0950	74	5.63
Aug. 12, 1954	0835	72	1.93	July 11, 1963	1445	81	4.95
Sept. 15, 1954	1345	72	.05	July 23, 1963	0930	72	6.11
Nov. 10, 1954	1100	47	5.10	Aug. 8, 1963	0800	81	.90
Dec. 7, 1954	1340	42	3.34	Aug. 22, 1963	0740	70	3.12
Jan. 26, 1955	1140	33	17.2	Sept. 5, 1963	1255	79	1.76
Mar. 3, 1955	0840	37	62.5	Sept. 18, 1963	0930	72	2.63

WYACONDA RIVER BASIN

Temperature and Discharge of Wyaconda River above Canton, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)
Oct. 10, 1963	0645	60	.03			
Nov. 7, 1963	1020	51	1.23			
Nov. 14, 1963	0845	42	.80			
Dec. 5, 1963	1115	36	2.01			
Dec. 12, 1963	1340	33	1.58			
Jan. 16, 1964	0855	35	.05			
Jan. 22, 1964	1015	34	.53			
Feb. 5, 1964	1330	33	7.29			
Feb. 19, 1964	1235	35	7.23			
Mar. 6, 1964	0910	33	19.9			
Mar. 17, 1964	1140	44	10.1			
Apr. 2, 1964	0800	47	14.1			
Apr. 22, 1964	1350	60	5,740			
May 12, 1964	1220	68	21.5			
July 9, 1964	0825	74	27.8			
Aug. 7, 1964	0655	87	2.44			
Aug. 20, 1964	1000	73	1.26			
Sept. 2, 1964	0930	73	5.87			
Sept. 22, 1964	1550	69	5.01			
Oct. 8, 1964	0830	54	1.43			
Dec. 3, 1964	0820	33	5.64			
Dec. 17, 1964	1115	32	12.6			
Jan. 8, 1965	0705	43	117			
Jan. 19, 1965	1025	33	13.4			
Feb. 3, 1965	1210	33	25.4			
Feb. 16, 1965	1145	35	83.9			
Mar. 10, 1965	1705	34	199			
Apr. 16, 1965	0620	48	2,060			
May 5, 1965	1240	74	57.3			
June 3, 1965	1050	69	28.8			
June 17, 1965	0820	66	14.6			
July 8, 1965	0855	76	606			
Aug. 5, 1965	0915	77	4.72			
Sept. 3, 1965	1310	71	25.2			
Oct. 7, 1965	1025	55	19.7			
Nov. 3, 1965	0645	50	7.68			
Dec. 9, 1965	0945	36	7.84			
Dec. 14, 1965	0850	38	11.0			
Jan. 6, 1966	1445	30	58.2			
Mar. 2, 1966	1210	35	28.8			
Apr. 11, 1966	1455	47	26.2			
May 25, 1966	1645	69	192			
July 11, 1966	1050	86	8.23			
July 12, 1966	0915	80	7.48			
Aug. 4, 1966	0905	71	22.4			
Sept. 6, 1966	1110	67	2.72			
Sept. 20, 1966	1340	62	11.4			
Oct. 5, 1966	1400	58	1.19			
Oct. 20, 1966	1100	50	8.66			
Nov. 8, 1966	0805	50	3.26			
Nov. 17, 1966	1120	51	3.41			
Dec. 7, 1966	1310	40	15.4			
Jan. 23, 1967	1215	35	7.36			
Apr. 10, 1967	1520	57	534			
May 1, 1967	1310	64	146			
June 5, 1967	1240	70	78.8			
July 10, 1967	1315	81	22.3			
Aug. 2, 1967	1645	82	43.4			
Sept. 11, 1967	1220	65	3.80			
Oct. 30, 1967	1200	47	543			
Dec. 4, 1967	1155	34	46.9			
Dec. 14, 1967	0900	35	65.5			
Feb. 7, 1968	1545	34	83.0			
Mar. 12, 1968	1100	39	45.3			
Mar. 19, 1968	1045	53	70.4			
Apr. 1, 1968	1125	52	1,430			
Apr. 29, 1968	1440	63	102			
May 8, 1968	1310	64	35			
June 3, 1968	1305	73	26.4			
July 10, 1968	1305	76	4.07			
Aug. 23, 1968	0935	80	2.58			
Sept. 18, 1968	1125	63	14.4			
Oct. 29, 1968	1140	45	4.50			
Nov. 21, 1968	0955	34	27.0			
Dec. 4, 1968	1510	36	148			
Feb. 6, 1969	0910	34	220			
Mar. 13, 1969	0930	33	93.8			
Apr. 23, 1969	1500	58	157			
Aug. 6, 1969	1145	76	17.8			
Sept. 2, 1969	1550	76	6.56			

NORTH FABIUS RIVER BASIN

5-4969.5 North Fabius River at Memphis, Mo.

Location.--W½ sec.12, T.65 N., R.12 W., at bridge on U. S. Highway 136, 1/2 mile west of Memphis, Scotland County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 20, 1945	1105	69	3.09				
Sept. 10, 1948	0820	69	6.76				
Oct. 5, 1961	0810	60	34.1				
May 16, 1962	1700	57	11.6				
June 22, 1962	0805	70	19.1				
Aug. 23, 1962	0630	91	3.59				
Nov. 9, 1962	0740	33	7.18				
Aug. 14, 1963	1105	83	2.41				
Nov. 5, 1963	1530	57	2.47				
Oct. 20, 1964	1105	55	1.76				

FABIUS RIVER BASIN

5-4970. North Fabius River at Monticello, Mo.

Location.--Lat 40°06'30", long 91°42'55", in SW¼SE¼ sec.6, T.61 N., R.7 W., on right bank upstream from bridge on State Highway 16, 1 mile south of Monticello, and 19 miles upstream from Middle Fabius River.

Drainage area.--452 sq mi.

Discharge records available.--February 1922 to September 1969. Monthly discharge only for some periods, published in WSP 1308.

Maximum temperature measured.--92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 14, 1945	1325	78	19.2	Sept. 15, 1954	1440	70	1.41
Sept, 19, 1945	1325	72	9.82	Oct. 8, 1954	0800	56	159
Apr. 26, 1946	0925	61	64.8	Nov. 10, 1954	1420	50	13.7
June 8, 1946	1125	82	20.5	Dec. 7, 1954	1645	40	7.87
July 11, 1946	0750	84	17.2	Jan. 10, 1955	1345	32	0
Aug. 15, 1946	1320	77	118	Jan. 26, 1955	1440	33	30.9
Sept. 19, 1946	0755	69	10.9	Mar. 23, 1955	1145	37	92.5
Oct. 26, 1946	1310	60	21.7	Apr. 19, 1955	1505	64	109
Dec. 4, 1946	1430	36	23.7	May 18, 1955	1335	70	123
Feb. 6, 1947	0920	33	52.9	June 16, 1955	0930	72	27.1
Mar. 12, 1947	1300	40	50.9	Aug. 16, 1955	1235	80	1.90
May 15, 1947	1030	69	50.3	Sept. 14, 1955	1335	75	.20
July 25, 1947	0900	68	18.3	Oct. 11, 1955	1450	71	18.3
Oct. 16, 1947	0810	68	7.44	Nov. 15, 1955	1350	46	6.01
Nov. 20, 1947	0910	47	70.2	Dec. 13, 1955	1550	32	2.47
Jan. 14, 1948	1350	32	92.7	Feb. 28, 1956	1520	36	49.8
Apr. 29, 1948	1505	68	115	Mar. 27, 1956	1435	48	5.04
June 3, 1948	1545	86	13.4	Apr. 25, 1956	1300	42	1.57
July 9, 1948	1040	86	37.6	May 22, 1956	0940	69	.62
Aug. 11, 1948	1440	80	10.5	Aug. 16, 1956	1115	79	68.6
Sept. 10, 1948	1640	74	41.9	Nov. 13, 1956	1115	52	1.14
Oct. 7, 1948	1400	57	60.6	Dec. 12, 1956	0825	34	.23
Dec. 5, 1948	1115	42	10.8	Jan. 8, 1957	1450	37	2.57
Jan. 6, 1949	1410	35	27.8	Dec. 4, 1957	1220	34	15.0
Feb. 2, 1949	1435	33	30.2	Jan. 9, 1958	0945	33	48.5
Apr. 8, 1949	1450	58	139	June 18, 1958	1500	70	131
May 6, 1949	0925	77	38.0	Jan. 6, 1959	1610	32	18.8
June 14, 1949	1130	77	135	June 11, 1959	1300	80	40.7
Sept. 8, 1949	1145	69	15.9	Nov. 17, 1959	1610	37	23.6
Oct. 11, 1949	1125	63	11.1	Feb. 11, 1960	1120	31	648
Dec. 6, 1949	1325	41	16.4	June 16, 1960	1555	75	458
Jan. 12, 1950	1115	32	149	July 15, 1960	0830	74	137
May 3, 1950	0730	54	107	Dec. 21, 1960	1235	33	3.66
May 30, 1950	1530	70	88.8	Jan. 12, 1961	0810	33	7.59
June 27, 1950	1645	81	83.9	Feb. 1, 1961	1735	32	2.24
Aug. 1, 1950	1505	76	18.1	Feb. 15, 1961	1410	35	34.6
Aug. 6, 1950	1500	72	9.51	Apr. 3, 1961	1020	47	97.6
Oct. 4, 1950	1400	64	6.14	May 4, 1961	0850	57	68.1
Nov. 9, 1950	1130	34	9.52	May 25, 1961	1035	68	33.7
Dec. 5, 1950	1635	32	7.53	June 14, 1961	0730	74	14.9
Jan. 9, 1951	1105	32	2.75	July 13, 1961	1455	84	7.31
Mar. 7, 1951	1030	36	63.0	Aug. 10, 1961	1030	84	9.29
May 2, 1951	0835	64	115	Sept. 7, 1961	1550	84	6.00
May 15, 1951	1610	76	120	Sept. 14, 1961	1525	64	4,800
June 5, 1951	1640	68	40.4	Oct. 6, 1961	0905	60	74.0
July 10, 1951	1700	83	46.4	Oct. 11, 1961	1040	68	50.3
Oct. 4, 1951	0920	63	9.28	Nov. 29, 1961	1240	36	136
Dec. 4, 1951	1425	46	52.3	Jan. 11, 1962	0710	33	109
May 10, 1952	1325	60	437	Feb. 2, 1962	0820	33	411
Oct. 7, 1952	1315	52	1.70	Mar. 7, 1962	1325	32	82.7
Nov. 13, 1952	1155	44	5.62	Apr. 4, 1962	0610	50	130
Dec. 3, 1952	1020	40	8.59	May 9, 1962	1400	48	434
Jan. 6, 1953	1640	32	5.02	June 7, 1962	1020	73	88.2
Feb. 10, 1953	1430	40	130	June 20, 1962	1250	68	22.4
Feb. 19, 1953	1510	39	52.3	Aug. 21, 1962	1200	76	10.0
June 2, 1953	0920	84	25.2	Sept. 7, 1962	1100	71	5.34
June 21, 1953	1020	84	23.9	Oct. 5, 1962	0910	58	124
July 7, 1953	1715	84	12.8	Oct. 24, 1962	1515	45	50.7
Sept. 10, 1953	0830	66	1.41	Dec. 11, 1962	1330	33	9.28
Nov. 3, 1953	1125	52	2.09	Jan. 9, 1963	1130	33	14.0
Dec. 1, 1953	1510	38	1.94	Feb. 7, 1963	1320	33	8.00
Jan. 7, 1954	1450	35	.83	Mar. 8, 1963	1500	37	340
Feb. 2, 1954	1440	34	0	Mar. 21, 1963	0940	38	293
Feb. 17, 1954	1035	36	17.1	May 8, 1963	1245	78	33.0
Mar. 3, 1954	1645	36	4.55	May 14, 1963	1330	70	163
Apr. 2, 1954	1105	48	10.2	June 5, 1963	1230	88	19.3
July 7, 1954	1400	80	3.58	June 18, 1963	1120	81	8.27

FABIUS RIVER BASIN

Temperature and Discharge of North Fabius River at Monticello, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
July 11, 1963	1240	84	11.0
July 22, 1963	1200	84	8.67
Aug. 7, 1963	1430	92	5.67
Aug. 22, 1963	0910	73	7.97
Sept. 5, 1963	1400	79	6.19
Sept. 18, 1963	1245	75	3.98
Oct. 9, 1963	1225	66	.87
Nov. 7, 1963	0830	50	4.49
Nov. 15, 1963	1040	43	3.98
Dec. 4, 1963	1530	37	5.10
Dec. 12, 1963	1510	33	1.86
Jan. 16, 1964	1035	35	.02
Jan. 22, 1964	1140	34	.78
Feb. 5, 1964	1450	33	7.73
Mar. 5, 1964	1515	37	42.0
Mar. 17, 1964	1325	47	13.5
Apr. 1, 1964	1525	49	23.0
June 2, 1964	1615	72	10.4
July 9, 1964	1045	82	15.5
Aug. 7, 1964	0850	86	5.71
Sept. 2, 1964	1555	78	8.06
Sept. 23, 1964	0910	66	83.8
Oct. 7, 1964	1230	55	4.28
Nov. 5, 1964	0940	56	5.93
Dec. 3, 1964	1015	33	5.89
Dec. 17, 1964	1420	33	12.3
Jan. 8, 1965	0930	45	124
Jan. 19, 1965	1330	33	16.5
Feb. 3, 1965	1050	33	25.4
Feb. 16, 1965	1305	35	98.8
Mar. 10, 1965	1520	35	236
Apr. 16, 1965	0910	49	1,880
May 5, 1965	1100	73	76.9
June 3, 1965	0900	70	26.4
June 17, 1965	0920	71	24.0
July 9, 1965	0620	76	59.0
Aug. 5, 1965	1055	88	4.89
Sept. 3, 1965	1045	71	19.0
Oct. 6, 1965	1225	56	28.4
Nov. 3, 1965	0815	51	14.4
Dec. 8, 1965	1440	37	16.9
Dec. 14, 1965	1010	38	21.8
Jan. 6, 1966	1110	33	78.0
Mar. 2, 1966	1115	35	43.3
Mar. 16, 1966	1100	47	85.3
July 11, 1966	0940	87	12.4
July 12, 1966	1015	80	10.9
Aug. 4, 1966	0945	74	41.9
Aug. 18, 1966	1130	77	15.7
Sept. 6, 1966	1015	71	7.59
Sept. 21, 1966	1025	62	13.2
Oct. 5, 1966	1440	58	5.31
Oct. 20, 1966	1315	50	13.9
Nov. 7, 1966	1555	55	8.96
Nov. 17, 1966	0945	51	7.30
Dec. 7, 1966	1350	41	24.5
Jan. 23, 1967	1125	34	8.48
Mar. 7, 1967	1430	36	37.4
May 1, 1967	1150	66	140
June 5, 1967	1135	70	120
July 10, 1967	1210	83	39.3
July 25, 1967	1355	75	74.6
Aug. 2, 1967	1530	86	34.0
Sept. 11, 1967	1115	66	5.90
Dec. 4, 1967	1055	34	58.6
Dec. 14, 1967	1035	34	91.8
Feb. 13, 1968	1305	33	30.6
Mar. 12, 1968	0950	39	58.2
Mar. 19, 1968	1235	53	101
Apr. 18, 1968	1045	55	800
Apr. 29, 1968	1255	63	150
May 9, 1968	0900	63	102
May 14, 1968	0930	72	39.3
June 3, 1968	1200	78	48.2
July 10, 1968	0755	75	14.5
Aug. 9, 1968	1200	88	14.3
Oct. 29, 1968	1320	52	7.78
Nov. 21, 1968	1130	35	27.2
Dec. 4, 1968	1425	37	162
Feb. 6, 1969	1155	34	178
Mar. 13, 1969	1150	36	108
Apr. 23, 1969	1340	56	179
May 14, 1969	1110	60	116
June 2, 1969	1525	60	287
June 17, 1969	1330	70	21.5
Aug. 6, 1969	1430	83	30.4
Sept. 2, 1969	1510	75	11.2

FABIUS RIVER BASIN

5-4975. Middle Fabius River near Baring, Mo.

Location.--Lat 40°19'55", long 92°12'50", in NW¼NW¼ sec.26, T.64 N., R.12 W., on right bank at downstream side of bridge on State Highway 15, 1 mile downstream from confluence of North and South Forks and 6 miles north of Baring.

Drainage area.--185 sq mi.

Discharge records available.--April 1930 to September 1960, discontinued.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 20, 1945	1145	68	0.31	Dec. 8, 1954	1050	37	3.59
Apr. 25, 1946	1030	64	22.1	Jan. 25, 1955	1645	33	12.5
June 9, 1946	1040	75	1.88	Feb. 23, 1955	1230	34	109
July 12, 1946	0710	67	.54	Mar. 23, 1955	1750	36	83.6
Aug. 15, 1946	1400	71	4.54	Apr. 20, 1955	1040	68	33.3
Sept. 21, 1946	1330	68	5.63	May 19, 1955	1115	72	32.6
Oct. 25, 1946	0910	58	13.5	June 11, 1955	1620	70	5.00
Dec. 5, 1946	1325	42	8.03	Aug. 17, 1955	0840	80	.02
Feb. 7, 1947	0820	32	10.5	Sept. 15, 1955	1310	79	.01
Apr. 13, 1947	1415	54	99.6	Oct. 12, 1955	1505	65	3.50
July 24, 1947	0700	62	2.61	Nov. 16, 1955	1200	36	.30
Sept. 12, 1947	1600	74	1.58	Dec. 14, 1955	1150	33	.43
Oct. 15, 1947	1415	70	.17	Jan. 11, 1956	0855	33	.48
Nov. 21, 1947	0825	40	33.1	Feb. 8, 1956	1125	37	.80
Jan. 15, 1948	1120	33	65.2	Feb. 29, 1956	1425	35	9.86
Apr. 30, 1948	1150	59	23.3	Apr. 24, 1956	1545	47	.39
June 4, 1948	1130	79	2.10	Dec. 3, 1957	1705	33	15.7
July 10, 1948	1140	83	.66	Jan. 8, 1958	0900	33	42.1
Aug. 13, 1948	0855	77	.13	May 13, 1958	1245	70	23.2
Sept. 10, 1948	0935	64	.45	June 17, 1958	1745	68	28.0
Oct. 8, 1948	1500	58	.35	Jan. 7, 1959	1245	33	8.07
Nov. 6, 1948	0830	48	.76	June 10, 1959	1655	80	6.21
Dec. 4, 1948	1520	43	.27	Nov. 18, 1959	1125	42	7.93
Jan. 6, 1949	0905	36	3.12	Feb. 10, 1960	1425	32	1,070
Feb. 3, 1949	1410	34	7.72	July 16, 1960	0935	78	25.5
Mar. 11, 1949	1615	36	64.3	June 5, 1963	0655	85	4.30
Apr. 9, 1949	1620	53	39.2	Oct. 4, 1963	0710	70	.03
May 7, 1949	1735	66	6.95	Feb. 5, 1964	0805	33	.82
July 8, 1949	1610	82	29.0	June 4, 1964	0730	70	1.79
Aug. 14, 1949	0855	75	40.1				
Oct. 12, 1949	0835	52	2.66				
Dec. 7, 1949	1150	37	8.02				
May 3, 1950	1730	63	42.3				
May 31, 1950	1335	65	77.1				
Aug. 2, 1950	1645	76	2.54				
Sept. 8, 1950	1115	70	1.36				
Oct. 5, 1950	0945	58	.47				
Nov. 10, 1950	1330	34	.80				
Dec. 7, 1950	1120	32	.69				
Jan. 10, 1951	1730	32	.86				
Feb. 9, 1951	0745	32	10.0				
Feb. 13, 1951	1605	32	20.4				
Mar. 7, 1951	1635	38	23.7				
Apr. 5, 1951	1435	40	109				
Apr. 20, 1951	1125	49	43.8				
May 3, 1951	0825	68	80.5				
June 6, 1951	1440	65	8.51				
July 11, 1951	1710	74	7.58				
Aug. 9, 1951	1145	85	4.12				
Oct. 5, 1951	1120	64	.69				
Nov. 1, 1951	1305	40	15.9				
Dec. 5, 1951	1335	43	22.6				
Feb. 6, 1952	1040	32	44.4				
May 11, 1952	0755	51	86.3				
Nov. 8, 1952	0900	48	0				
Dec. 4, 1942	1000	34	1.62				
Jan. 7, 1953	1355	32	.14				
Feb. 12, 1953	0925	33	137				
June 2, 1953	1630	84	6.71				
Dec. 2, 1953	0940	54	.04				
Feb. 3, 1954	1140	34	0				
Feb. 17, 1954	1410	36	.39				
Mar. 3, 1954	1655	36	.07				
Mar. 26, 1954	1030	38	14.6				
Apr. 1, 1954	1750	50	.36				
June 8, 1954	1700	84	19.1				
July 8, 1954	1130	88	.12				
Nov. 11, 1954	1300	55	4.13				

FABIUS RIVER BASIN

5-4977. Bridge Creek Branch near Baring, Mo.

Location.--In NE¼SE¼ sec.22, T.64 N., R.12 W., at culvert under State Highway 15 and about 1 mile northwest of Baring.

Drainage area.--2.38 sq mi.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 5, 1961	1020	50	0.25				
Apr. 21, 1961	1340	64	.16				
May 3, 1961	0955	52	.19				
May 19, 1961	1310	59	.24				
Oct. 5, 1961	0640	60	.01				
Feb. 8, 1962	1050	33	.55				
Apr. 3, 1962	0715	33	.30				
June 5, 1963	1750	85	.01				
Jan. 10, 1964	1120	33	.06				
Dec. 2, 1964	1140	33	.01				
Jan. 7, 1965	0920	40	1.67				
Apr. 15, 1965	1510	52	5.70				

FABIUS RIVER BASIN

5-4980. Middle Fabius River near Monticello, Mo.

Location.--Lat 40°05'40", long 91°44'10", in SE¼ sec.12, T.61 N., R.8 W., near center of span on upstream side of bridge on State Highway 16, 2½ miles southwest of Monticello, 8 miles downstream from Radish Branch, and 17 miles upstream from mouth.

Drainage area.--393 sq mi.

Discharge records available.—July 1945 to September 1969.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 25, 1945	1520	51	7.69	May 18, 1955	1200	75	144
Apr. 26, 1946	1135	62	81.7	June 16, 1955	1045	72	25.9
June 8, 1946	1025	76	17.3	Aug. 16, 1955	1125	78	1.73
July 11, 1946	0935	79	5.34	Sept. 14, 1955	1335	70	.18
Aug. 16, 1946	1450	82	12.8	Oct. 12, 1955	0845	64	28.3
Sept. 19, 1946	1125	72	8.31	Nov. 15, 1955	1310	46	2.44
Oct. 26, 1946	1150	60	21.2	Dec. 13, 1955	1440	33	2.04
Dec. 4, 1946	1540	51	14.3	Jan. 10, 1956	1305	34	2.07
Feb. 6, 1947	1200	34	70.2	Feb. 7, 1956	1330	36	1.65
Mar. 12, 1947	1415	38	47.8	Feb. 28, 1956	1320	34	52.4
May 15, 1947	1420	72	45.0	Mar. 27, 1956	1350	45	4.65
July 25, 1947	1005	69	12.7	Apr. 25, 1956	1215	43	1.49
Oct. 16, 1947	1050	68	3.16	May 22, 1956	0840	69	2.68
Nov. 20, 1947	1035	48	83.4	June 18, 1956	1120	72	.32
Jan. 14, 1948	1500	32	14.6	Jan. 8, 1957	1405	40	.24
Apr. 29, 1948	1310	65	195	Dec. 4, 1957	1145	34	28.9
June 3, 1948	1605	83	11.1	Apr. 3, 1958	1445	44	48.3
July 9, 1948	1300	86	22.0	June 18, 1958	1310	70	87.1
Aug. 11, 1948	1300	78	7.79	Jan. 6, 1959	1540	32	11.2
Oct. 10, 1948	1730	72	16.8	June 12, 1959	1130	83	23.7
Nov. 6, 1948	1620	59	20.9	Nov. 17, 1959	1415	39	25.4
Dec. 5, 1948	1240	42	5.07	Feb. 11, 1960	1000	32	1,390
Jan, 6, 1949	1530	37	22.0	July 15, 1960	0545	74	15.4
Feb. 2, 1949	1555	34	44.3	Dec, 21, 1960	1035	34	3.21
Mar. 10, 1949	1535	34	284	Jan. 12, 1961	0955	33	3.64
Apr. 8, 1949	1605	57	119	Feb. 1, 1961	1505	33	1.99
May 6, 1949	0810	74	36.5	Apr. 3, 1961	1200	47	114
July 8, 1949	0940	79	84.7	May 4, 1961	0950	55	75.3
Aug. 12, 1949	1400	81	39.0	May 25, 1961	1150	65	38.9
Oct. 11, 1949	1320	64	9.90	June 13, 1961	1745	76	16.0
Dec. 6, 1949	1420	41	13.9	July 13, 1961	1355	78	8.76
Jan. 12, 1950	0910	34	4.50	Aug. 10, 1961	1210	81	4.66
Feb. 7, 1950	1345	33	71.8	Sept. 7, 1961	1630	76	1.59
May 3, 1950	1030	60	92.5	Sept. 15, 1961	1050	62	1,990
May 20, 1950	1645	68	114	Oct. 6, 1961	1030	60	62.5
June 27, 1950	1725	80	79.3	Nov. 29, 1961	1035	36	131
Aug. 1, 1950	1640	76	12.6	Jan. 11, 1962	1110	33	115
Sept. 6, 1950	1550	72	10.1	Jan. 17, 1962	1010	33	88.4
Oct. 3, 1950	1600	67	2.99	Feb. 1, 1962	1415	33	445
Nov. 9, 1950	1025	36	7.56	Mar. 7, 1962	1250	32	105
Dec. 5, 1950	1510	32	4.44	Apr. 4, 1962	0750	50	111
Jan. 9, 1951	1555	32	3.68	May 8, 1962	1645	52	81.7
Feb. 14, 1951	1030	32	47.2	June 6, 1962	1550	71	163
Mar. 6, 1951	1745	38	97.6	Aug. 10, 1962	1150	61	16.7
May 2, 1951	1925	60	133	Sept. 7, 1962	0945	62	1.82
June 5, 1951	1525	65	36.3	Oct. 24, 1962	1230	47	67.7
July 10, 1951	1510	80	54.8	Nov. 29, 1962	1615	40	19.3
Oct. 4, 1951	1050	64	6.00	Jan. 9, 1963	1015	33	13.8
Dec. 4, 1951	1350	46	45.8	Feb. 7, 1963	1140	33	17.4
Oct. 7, 1952	1200	51	0	Mar. 8, 1963	1445	36	374
Nov. 13, 1952	1050	40	4.00	May 8, 1963	1130	74	29.2
Dec. 2, 1952	1050	36	5.84	May 14, 1963	1500	70	109
Feb. 10, 1953	1535	40	78.1	June 6, 1963	1725	86	15.0
Feb. 19, 1953	1340	38	30.9	June 18, 1963	1215	75	5.74
June 1, 1953	0830	70	27.6	July 11, 1963	1105	76	17.1
Sept. 10, 1953	0945	66	.14	July 23, 1963	1300	81	8.73
Dec. 1, 1953	1405	42	.09	Aug. 7, 1963	1325	85	1.56
Feb. 2, 1954	1305	34	1.32	Aug. 22, 1963	1145	71	3.87
Mar. 4, 1954	1030	35	1.78	Sept. 5, 1963	1455	77	2.09
Apr. 2, 1954	0930	47	8.25	Sept. 18, 1963	1405	75	4.15
July 7, 1954	1220	88	1.88	Oct. 9, 1963	1115	68	.17
Sept. 15, 1954	1540	72	1.40	Oct. 17, 1963	1305	68	.21
Nov. 9, 1954	1655	50	10.0	Nov. 6, 1963	1545	51	.56
Dec. 7, 1954	1515	42	5.85	Nov. 15, 1963	0945	47	.27
Jan. 26, 1955	1540	33	35.3	Dec. 4, 1963	1610	39	2.78
Mar. 23, 1955	1030	36	73.6	Dec. 12, 1963	1610	33	1.62
Apr. 19, 1955	1320	64	95.8	Jan. 16, 1964	1000	34	1.14

Temperature and Discharge of Middle Fabius River near Monticello, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 22, 1964	1320	34	6.77				
Feb. 6, 1964	0655	33	6.29				
Feb. 19, 1964	1000	36	5.93				
Mar. 5, 1964	1630	35	19.2				
Mar. 17, 1964	1500	45	16.0				
Apr. 1, 1964	1420	45	43.5				
Apr. 15, 1964	1205	51	43.5				
Apr. 22, 1964	1100	64	4,320				
June 3, 1964	1020	66	9.64				
July 9, 1964	1010	78	8.21				
Aug. 7, 1964	0955	86	2.52				
Sept. 3, 1964	0900	75	6.86				
Sept. 23, 1964	1110	67	146				
Oct. 7, 1964	1200	55	3.86				
Nov. 5, 1964	1020	56	1.67				
Dec. 3, 1964	1150	33	8.11				
Jan. 8, 1965	1135	43	216				
Jan. 19, 1965	1440	33	30.4				
Feb. 3, 1965	0930	33	59.4				
Feb. 18, 1965	1140	33	75.2				
Mar. 10, 1965	1400	35	315				
May 6, 1965	1705	70	60.4				
June 3, 1965	0740	71	16.5				
June 17, 1965	1010	71	12.5				
July 8, 1965	1120	76	17.8				
July 9, 1965	1655	78	9.04				
Aug. 6, 1965	1710	77	1.15				
Sept. 3, 1965	0920	68	3.57				
Nov. 3, 1965	1115	52	9.37				
Dec. 8, 1965	1530	37	9.44				
Dec. 14, 1965	1210	37	12.4				
Jan. 6, 1966	1155	33	66.0				
Mar. 2, 1966	1030	35	31.6				
Apr. 11, 1966	1305	46	29.2				
Apr. 25, 1966	1410	68	408				
July 11, 1966	0830	83	12.5				
July 12, 1100	1100	80	10.5				
Aug. 4, 1966	1140	74	24.1				
Aug. 18, 1966	1220	76	8.10				
Sept. 21, 1966	1135	62	4.16				
Oct. 5, 1966	1525	58	.95				
Oct. 20, 1966	1215	50	11.9				
Nov. 7, 1966	1510	55	1.82				
Nov. 17, 1966	0850	50	1.29				
Dec. 7, 1966	1440	39	14.7				
Jan. 23, 1967	1050	34	8.17				
Mar. 7, 1967	1320	36	38.2				
May 1, 1967	1050	61	135				
June 5, 1967	1030	66	119				
July 10, 1967	1120	77	28.5				
July 25, 1967	1240	72	103				
Aug. 2, 1967	1425	78	54.0				
Sept. 11, 1967	1025	64	4.39				
Oct. 9, 1967	0840	56	113				
Oct. 30, 1967	0955	47	867				
Dec. 4, 1967	0955	34	48.9				
Dec. 14, 1967	1140	34	109				
Feb. 7, 1968	1230	34	132				
Mar. 12, 1968	0845	38	36.4				
Mar. 19, 1968	1330	53	69.4				
Apr. 1, 1968	0840	50	43.0				
Apr. 29, 1968	1125	58	128				
May 15, 1968	1130	72	34.7				
June 3, 1968	1110	70	26.7				
July 9, 1968	1755	82	3.48				
Aug. 23, 1968	0800	81	3.94				
Sept. 17, 1968	1350	66	5.98				
Oct. 29, 1968	1425	47	2.27				
Nov. 11, 1968	1245	35	33.1				
Dec. 4, 1968	1230	37	309				
Apr. 23, 1969	1235	55	233				
May 14, 1969	1210	58	108				
June 17, 1969	1420	70	20.2				
Aug. 6, 1969	1630	83	21.8				
Sept. 2, 1969	1230	74	6.37				

FABIUS RIVER BASIN

5-5000. South Fabius River near Taylor, Mo.

Location.--Lat 39°53'50", long 91°34'50", in SW¼NW¼ sec. 21, T.59 N., R.6 W., on right bank at downstream side of highway bridge, 4½ miles southwest of Taylor, 5 miles downstream from Grassy Creek, and 5.3 miles upstream from confluence with North Fabius River.

Drainage area.--620 sq mi. Area at site used prior to May 14, 1936, 630 sq mi.

Discharge records available.--October 1934 to September 1969. Monthly discharge only prior to December 1934, published in WSP 1308.

Maximum temperature measured.--95° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 14, 1945	1015	77	66.9	Dec. 7, 1954	1220	40	10.4
Oct. 24, 1945	1715	52	22.2	Jan. 27, 1955	1135	32	34.6
Apr. 26, 1946	1400	61	187	Mar. 22, 1955	1435	46	113
June 8, 1946	0745	74	33.8	Apr. 14, 1955	1230	60	2,080
July 10, 1946	1320	91	11.9	June 15, 1955	1440	74	74.4
Aug. 17, 1946	0830	76	312	Aug. 16, 1955	0930	74	7.20
Sept. 18, 1946	1400	77	8.00	Sept. 13, 1955	1720	70	3.07
Oct. 26, 1946	0900	57	40.6	Oct. 11, 1955	1200	69	106
Dec. 4, 1946	0915	34	24.2	Nov. 15, 1955	1120	46	5.07
Jan. 9, 1947	1130	31	43.0	Dec. 13, 1955	1110	35	4.80
Feb. 5, 1947	1000	34	98.6	Jan. 10, 1956	1130	34	5.20
Mar. 12, 1947	0805	40	44.2	Feb. 7, 1956	0940	38	5.50
Apr. 15, 1947	1020	54	278	Mar. 27, 1956	1200	42	5.80
May 14, 1947	1320	84	63.5	Apr. 10, 1956	0825	40	1.50
July 25, 1947	1120	68	21.2	Apr. 25, 1956	1440	43	1.20
Sept. 10, 1947	1415	79	1.48	May 21, 1956	1650	72	9.80
Oct. 16, 1947	1300	70	5.70	June 19, 1956	0820	73	3.30
Nov. 19, 1947	1120	38	206	Jan. 8, 1957	1000	37	1.85
Feb. 17, 1948	0930	34	275	Dec. 4, 1957	1645	34	60.6
Apr. 29, 1948	1050	65	90.0	Jan. 9, 1958	1440	34	91.9
June 3, 1948	1045	86	14.6	Apr. 4, 1958	1120	41	70.0
July 8, 1948	1350	85	205	June 19. 1958	0855	70	98.0
Sept. 11, 1948	0900	65	22.0	Jan. 6, 1959	1110	33	7.90
Nov. 7, 1948	0925	48	65.5	June 12, 1959	0845	76	40.8
Dec. 5, 1948	1350	42	9.50	July 8, 1959	1030	82	21.5
Jan. 7, 1949	1120	39	29.9	Nov. 17, 1959	1005	35	18.9
Feb. 2, 1949	1105	32	96.8	July 14, 1960	1625	76	4,660
Mar. 10, 1949	1300	34	323	Dec. 21, 1960	1620	34	6.60
Apr. 8, 1949	1200	53	145	Jan. 12, 1961	1300	33	7.20
May 6, 1949	1750	74	66.9	Feb. 15, 1961	1645	35	465
June 14, 1949	0735	75	62.0	Apr. 3, 1961	1555	49	116
July 7, 1949	0950	81	56.0	May 4, 1961	1110	69	121
Aug. 11, 1949	1545	84	17.7	June 14, 1961	1120	77	31.0
Oct. 11, 1949	0840	63	13.8	July 17, 1961	1105	74	13.9
Dec. 6, 1949	0920	40	15.1	Aug. 10, 1961	1545	87	8.90
Jan. 11, 1950	1430	34	140	Sept. 8, 1961	0710	76	7.90
Feb. 7, 1950	1040	33	84.3	Oct. 6, 1961	1325	77	97.0
May 2, 1950	1315	50	134	Nov. 30, 1961	0800	38	169
June 27, 1950	0950	76	99	Jan. 11, 1962	1400	33	219
Aug. 1, 1950	1200	78	19.8	Mar. 6, 1962	1305	32	234
Sept. 6, 1950	1300	72	29.4	Apr. 4, 1962	1050	50	153
Oct. 3, 1950	1130	68	7.30	May 8, 1962	1450	51	110
Nov. 9, 1950	0830	48	4.50	June 7, 1962	1445	71	122
Dec. 5, 1950	1300	32	6.30	Sept. 12, 1962	1420	78	9.10
Jan. 9, 1951	1340	32	9.20	Oct. 5, 1962	1155	65	58.8
Mar. 6, 1951	1520	40	139	Nov. 29, 1962	1350	42	11.0
Apr. 3, 1951	1530	36	494	Jan. 9, 1963	0705	33	7.40
May 1, 1951	1610	64	137	Feb. 7, 1963	0920	33	25.9
July 10, 1951	1150	82	397	Mar. 9, 1963	1315	40	327
Oct. 3, 1951	1550	69	22.4	Apr. 4, 1963	0750	58	62.2
Dec. 4, 1951	1135	46	69.9	May 15, 1963	0820	68	66.0
Oct. 7, 1952	1100	52	.33	June 6, 1963	0720	86	23.9
Nov. 12, 1952	1635	47	3.30	July 12, 1963	1030	75	31.4
Jan. 6, 1953	1310	34	6.70	Aug. 8, 1963	1120	89	.78
Feb. 10, 1953	1000	38	78.5	Sept. 6, 1963	0750	68	2.50
June 1, 1953	1655	82	[illegible]	Oct. 9, 1963	0910	68	.10
July 7, 1953	1120	78	25.3	Nov. 7, 1963	1250	54	.30
Sept. 9, 1953	1105	66	.86	Dec. 5, 1963	1345	42	1.60
Oct. 3, 1953	0820	52	.23	Jan. 16, 1964	1255	35	2.30
Dec. 1, 1953	1110	40	.49	Mar. 6, 1964	1110	43	16.9
Jan. 5, 1954	1405	36	2.18	Apr. 2, 1964	1040	48	96.9
Feb. 2, 1954	1040	34	2.74	May 11, 1964	1110	70	45.3
Mar. 4, 1954	1305	39	3.80	June 3, 1964	1355	73	13.4
Apr. 9, 1954	0620	54	171	July 9, 1964	1420	85	26.8
June 10, 1954	1600	84	56	Aug. 7, 1964	1205	89	2.50
July 7, 1954	0945	91	5.60	Sept. 1, 1964	1305	74	34.2
Nov. 9, 1954	1300	50	13.0	Nov. 5, 1964	1140	58	1.00

FABIUS RIVER BASIN

Temperature and Discharge of South Fabius River near Taylor, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 3, 1964	1430	33	9.60				
Jan. 20, 1965	1310	34	56.6				
Feb. 3, 1965	0800	33	128				
Mar. 11, 1965	1005	35	447				
May 6, 1965	0735	70	71.3				
July 8, 1965	1015	77	75.2				
Aug. 6, 1965	0715	79	3.30				
Sept. 8, 1965	0850	69	169				
Nov. 3, 1965	1335	56	7.00				
Dec. 9. 1965	1150	41	9.60				
Mar. 2, 1966	0835	37	21.5				
Apr. 12, 1966	0900	45	248				
May 25, 1966	1120	67	1,040				
June 6, 1966	1640	35	83.3				
July 11, 1966	1405	95	12.3				
Aug. 4, 1966	1535	80	55.4				
Sept. 6, 1966	1420	76	10.3				
Oct. 5, 1966	1115	58	1.57				
Nov. 8, 1966	1235	56	2.36				
Dec. 7, 1966	1025	41	27.4				
Jan. 23, 1967	1510	37	18.4				
Mar. 8, 1967	1100	34	658				
Apr. 10, 1967	1830	58	1,120				
June 5, 1967	1665	68	130				
July 10, 1967	1730	83	216				
Aug. 3, 1967	1025	78	168				
Sept. 11, 1967	1615	74	10.0				
Oct. 9, 1967	1555	59	48.5				
Dec. 4, 1967	1550	36	95.8				
Feb. 7, 1968	1010	34	225				
Mar. 12, 1968	1435	41	71.3				
Apr. 1, 1968	1615	59	56.6				
Apr. 29, 1968	1835	63	109				
June 3, 1968	1715	80	38.3				
July 11, 1968	0815	76	20.2				
Aug. 23, 1968	1155	87	24.0				
Sept. 18, 1968	1435	66	19.0				
Nov. 21, 1968	1325	36	105				
Dec. 11, 1968	1030	33	78.8				
Apr. 7, 1969	1550	56	1,090				
Apr. 24, 1969	1020	56	302				
May 15, 1969	1015	60	194				
June 19, 1969	1330	74	44.6				
Aug. 5, 1969	1645	81	47.0				
Sept. 3, 1969	1140	75	32.1				

NORTH RIVER BASIN

5-5005. North River at Bethel, Mo.

Location.--Lat 39°52'29", long 92°01'26", in NE¼NW¼ sec.33, T.59 N., R.10 W., at left abutment on downstream side of bridge on State Highway 15 at Bethel, 2½ miles upstream from Messner Branch.

Drainage area.—58 sq mi, approximately.

Discharge records available.—April 1930 to September 1969 (fragmentary prior to August 1936).

Maximum temperature measured.—87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 16, 1945	0700	74	1.54	Feb. 3, 1954	1120	32	0.28
Sept. 21, 1945	1005	70	.70	Mar. 2, 1954	1410	39	.15
Oct. 26, 1945	1700	50	.50	Apr. 2, 1954	1415	53	.71
Apr. 24, 1946	1320	62	46.8	July 8, 1954	1520	76	.11
June 10, 1946	1330	82	1.30	Aug. 4, 1954	1210	81	.05
July 12, 1946	1545	87	.18	Sept. 14, 1954	1340	74	.11
Aug. 15, 1946	0745	69	3.40	Nov. 11, 1954	1640	50	1.30
Sept. 25, 1946	0815	60	3.70	Dec. 8, 1954	1240	40	.56
Oct. 24, 1946	0940	61	1.20	Jan. 4, 1955	1520	34	166
Dec. 7, 1946	0915	41	.90	Feb. 23, 1955	0940	37	17.7
Feb. 8, 1947	0820	33	1.70	Mar. 24, 1955	0900	36	86.8
Mar. 15, 1947	0900	33	54	Apr. 20, 1955	1330	67	6.75
Apr. 12, 1947	1420	50	41.9	May 19, 1955	0850	65	4.19
May 17, 1947	1345	73	4.10	June 17, 1955	0715	65	1.60
June 21, 1947	1210	63	235	Aug. 17, 1955	1020	74	.35
July 23, 1947	1200	73	1.20	Oct. 13, 1955	1440	65	.91
Sept. 17, 1947	1545	67	.04	Nov. 16, 1955	1300	34	.47
Oct. 15, 1947	0900	63	.22	Dec. 14, 1955	1445	33	.39
Nov. 21, 1947	1545	43	3.60	Jan. 11, 1956	1110	34	.23
Jan. 16, 1948	1005	32	13.1	Feb. 8, 1956	1330	37	.43
Mar. 28, 1948	1105	49	42.3	Mar. 1, 1956	0835	36	.55
May 1, 1948	1340	67	2.20	Apr. 24, 1956	1330	48	.26
June 4, 1948	1800	82	.32	June 19, 1956	1625	77	13.6
July 11, 1948	1015	83	1.30	Dec. 11, 1956	1335	36	.11
Aug. 14, 1948	1010	64	16.2	Jan. 10, 1957	1125	37	.06
Sept. 9, 1948	1210	68	.75	Jan. 7, 1958	1415	33	5.80
Oct. 9, 1948	1035	53	1.49	Apr. 2, 1958	1715	50	3.70
Dec. 4, 1948	1015	37	.40	May 13, 1958	0845	61	2.10
Jan. 5, 1949	1405	34	2.50	June 17, 1958	1540	71	10.2
Feb. 4, 1949	1110	33	3.02	Aug. 27, 1958	1610	71	1.08
Mar. 12, 1949	1305	39	12.3	Feb. 24, 1959	1740	34	102
Apr. 10, 1949	1600	57	6.03	Apr. 30, 1959	0850	64	25.3
May 7, 1949	1345	75	2.20	June 10, 1959	1345	80	1.77
June 15, 1949	1830	72	50.8	Nov. 18, 1959	1510	45	.58
July 9, 1949	1115	84	3.05	Feb. 9, 1960	1545	33	126
Aug. 16, 1949	0910	77	1.60	July 13, 1960	1730	73	614
Sept. 12, 1949	1300	70	8.20	Dec. 20, 1960	1250	34	.23
Oct. 15, 1949	0900	58	.45	Jan. 11, 1961	0710	33	.25
Dec. 7, 1949	1440	36	.96	Feb. 14, 1961	1145	35	74
Feb. 8, 1950	1330	34	5.40	Mar. 7, 1961	1510	48	64.6
Apr. 7, 1950	1120	52	28.6	Apr. 5, 1961	1310	50	5.73
May 4, 1950	0840	64	10.1	May 2, 1961	0720	60	6.20
June 28, 1950	1420	75	1.40	May 19, 1961	1000	60	21.4
Aug. 3, 1950	0755	76	.21	July 11, 1961	1745	73	.14
Sept. 8, 1950	1505	72	.40	Aug. 8, 1961	1720	82	.20
Oct. 5, 1950	1130	59	.08	Sept. 6, 1961	1745	76	2.17
Nov. 10, 1950	1435	34	.30	Oct. 4, 1961	1355	60	5.15
Dec. 7, 1950	1000	32	.25	Jan. 9, 1962	1455	33	24.8
Feb. 8, 1951	1625	32	25.9	Feb. 28, 1962	1755	32	23.5
Mar. 8, 1951	1140	38	2.30	Apr. 2, 1962	1620	45	12.4
May 3, 1951	1115	67	3.58	May 3, 1962	0750	54	3.30
June 6, 1951	1650	69	3.04	June 5, 1962	1620	72	20.7
July 12, 1951	0805	70	23.2	Sept. 6, 1962	0925	58	.01
Aug. 9, 1951	1350	82	.57	Oct. 3, 1962	0935	59	.36
Sept. 7, 1951	1315	76	.54	Jan. 4, 1963	0630	33	.18
Oct. 5, 1951	1335	64	.85	Feb. 6, 1963	1500	35	1.60
Dec. 1, 1951	1540	39	1.90	Mar. 6, 1963	1600	35	74.5
Oct. 8, 1952	1010	50	0	Apr. 2, 1963	1215	62	1.95
Nov. 7, 1952	1515	40	.50	May 6, 1963	1600	70	.41
Dec. 4, 1952	1135	30	.36	June 4, 1963	1240	78	.70
Jan. 7, 1953	1545	34	.20	July 10, 1963	1135	72	.19
Feb. 12, 1953	1130	34	5.20	Sept. 4, 1963	1135	80	.05
Mar. 21, 1953	1405	48	498	Oct. 3, 1963	1050	70	.01
June 2, 1953	1840	84	.89	Nov. 5, 1963	1635	54	.02
Sept. 11, 1953	0825	66	.04	Dec. 3, 1963	1230	39	.05
Nov. 4, 1953	0920	49	.02	Jan. 15, 1964	1125	37	.07
Jan. 12, 1954	1045	33	.07	Feb. 4, 1964	1540	33	.16

NORTH RIVER BASIN

Temperature and Discharge of North River at Bethel, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 18, 1964	1310	35	0.26				
Mar. 4, 1964	1430	39	.35				
Apr. 21, 1964	1245	66	1,600				
June 4, 1964	0905	70	.66				
July 7, 1964	1615	81	.15				
Aug. 6, 1964	0710	83	.01				
Sept. 8, 1964	1635	78	13.4				
Oct. 8, 1964	1055	51	.08				
Nov. 4, 1964	1030	66	.11				
Dec. 2, 1964	0905	33	.21				
Jan. 6, 1965	1130	37	13.4				
Feb. 3, 1965	1725	33	3.57				
Mar. 9, 1965	1555	35	27.0				
Apr. 8, 1965	1530	61	43.7				
July 4, 1965	0900	67	36.1				
July 7, 1965	1010	69	3.40				
Aug. 4, 1965	1240	74	.17				
Sept. 2, 1965	1035	65	3.16				
Oct. 5, 1965	1255	56	.50				
Nov. 2, 1965	1015	50	.29				
Dec. 8, 1965	0840	36	.50				
Jan. 4, 1966	1310	37	2.40				
Apr. 14, 1966	1020	47	8.16				
May 23, 1966	1015	64	28.1				
July 12, 1966	1655	83	.10				
Sept. 8, 1966	1235	61	.07				
Nov. 7, 1966	1240	52	.52				
Jan. 25, 1967	0820	34	2.14				
Feb. 3, 1967	0840	33	6.58				
Mar. 7, 1967	0825	34	3.60				
Apr. 13, 1967	0805	55	56.4				
May 3, 1967	1540	55	5.72				
June 7, 1967	1435	68	2.80				
July 12, 1967	1455	75	6.30				
Aug. 1, 1967	1650	78	13.3				
Sept. 14, 1967	0830	65	.31				
Oct. 11, 1967	1120	48	4.99				
Nov. 2, 1967	0940	49	142				
Dec. 7, 1967	0920	39	7.40				
Feb. 8, 1968	1435	37	10.7				
Mar. 14, 1968	0925	38	3.40				
Apr. 13, 1968	1425	55	11.5				
May 2, 1968	0840	61	3.03				
June 5, 1968	1555	76	.80				
Aug. 9, 1968	0820	74	4.20				
Oct. 28, 1968	1505	47	1.44				
Feb. 19, 1969	1600	34	12.2				
Mar. 12, 1969	1245	34	14.6				
Apr. 30, 1969	1000	54	17.5				
June 4, 1969	1150	61	21.3				
July 10, 1969	1425	77	1,720				
Aug. 4, 1969	1800	73	1.64				
Sept. 4, 1969	1030	70	.32				

NORTH RIVER BASIN

5-5010. North River at Palmyra, Mo.

Location.--Lat 39°49'05", long 91°31'15", in SE¼SW¼ sec.13, T.58 N., R.6 W., on right bank 100 ft upstream from city waterworks dam, 1,000 ft upstream from bridge on U. S. Highways 24 and 61, half a mile north of Palmyra, and 7 miles upstream from mouth.

Drainage area.--373 sq mi.

Discharge records available.--December 1934 to September 1969.

Maximum temperature measured.--92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 14, 1945	0835	78	44.5	Dec. 1, 1953	0920	36	0.45
Oct. 24, 1945	1545	52	21.9	Jan. 5, 1954	1230	39	.61
Apr. 26, 1946	1630	62	98.8	Feb. 2, 1954	0840	34	.89
June 7, 1946	1455	72	27.5	Mar. 16, 1954	1305	38	1.01
July 10, 1946	1130	91	3.50	Mar. 30, 1954	1630	45	23.0
Aug. 17, 1946	1045	77	205	May 5, 1954	1155	59	124
Sept. 18, 1946	0845	78	5.55	June 10, 1954	1845	80	27.4
Oct. 26, 1946	1520	59	50.3	July 6, 1954	1755	91	1.67
Dec. 4, 1946	0720	36	28.9	Oct. 12, 1954	0830	66	198
Mar. 11, 1947	1600	44	26.8	Nov. 9, 1954	1110	46	3.86
Apr. 15, 1947	1420	53	176	Dec. 7, 1954	1005	40	4.50
May 14, 1947	1010	70	51.3	Jan. 27, 1955	1345	33	12.2
July 25, 1947	1340	69	15.8	Mar. 22, 1955	1150	39	63.6
Sept. 10, 1947	1130	83	.97	May 17, 1955	0840	70	109
Oct. 17, 1947	0810	62	4.89	June 15, 1955	1045	69	50.5
Nov. 19, 1947	0935	42	60.6	Aug. 16, 1955	0740	74	6.34
Jan. 14, 1948	0915	32	104	Sept. 13, 1955	1510	68	1.26
Feb. 16, 1948	1725	34	267	Oct. 10, 1955	1645	68	45.2
Apr. 29, 1948	0800	62	40.9	Nov. 15, 1955	0930	38	5.49
June 3, 1948	0830	78	9.74	Dec. 13, 1955	0935	35	3.55
July 8, 1948	1100	83	97.3	Jan. 10, 1956	0850	33	3.97
Aug. 10, 1948	1350	74	19.1	Feb. 6, 1956	1510	36	3.82
Sept. 11, 1948	1030	66	22.8	Feb. 28, 1956	0915	33	7.20
Oct. 7, 1948	0730	55	12.8	Apr. 25, 1956	1630	43	2.28
Dec. 6, 1948	0840	37	5.91	May 21, 1956	1525	72	5.88
Jan. 7, 1949	1145	40	21.8	June 18, 1956	1550	79	56.8
Feb. 2, 1949	0930	33	50.3	Aug. 16, 1956	1630	70	9.66
Mar. 10, 1949	1040	34	144	Jan. 8, 1957	0940	42	.40
Apr. 8, 1949	1025	49	79.2	Jan. 9, 1958	1515	34	36.6
May 5, 1949	1630	83	39.0	May 7, 1958	1355	64	117
June 13, 1949	1830	75	131	Jan. 6, 1959	0920	32	6.23
July 7, 1949	0820	84	37.6	June 12, 1959	0950	80	51.5
Aug. 11, 1949	1045	81	37.0	July 8, 1959	1205	84	14.4
Sept. 7, 1949	1430	70	12.8	Nov. 16, 1959	1530	39	5.88
Oct. 10, 1949	1630	70	17.3	Feb. 12, 1960	1035	32	98.3
Dec. 5, 1949	1635	40	13.7	July 13, 1960	1645	76	3,280
Jan. 11, 1950	1230	34	136	Dec. 22, 1960	0900	33	4.47
Feb. 7, 1950	0855	33	75.9	Jan. 12, 1961	1535	33	5.84
May 2, 1950	1020	54	95.6	Feb. 16, 1961	0915	36	116
May 30, 1950	0820	66	252	Apr. 4, 1961	1030	50	100
Aug. 1, 1950	0830	76	10.1	May 4, 1961	1515	59	78.8
Sept. 6, 1950	0955	70	16.2	May 18, 1961	1050	59	212
Oct. 3, 1950	0930	65	3.21	June 14, 1961	1250	76	32.8
Nov. 8, 1950	1430	46	2.24	July 17, 1961	1520	76	22.7
Dec. 5, 1950	1040	32	5.74	Aug. 10, 1961	1745	82	15.7
Jan. 9, 1951	1210	32	11.1	Sept. 8, 1961	1020	78	10.9
Feb. 6, 1951	1350	34	112	Sept. 14, 1961	1255	69	15,300
Feb. 14, 1951	1615	32	18.6	Sept. 15, 1961	0800	60	4,480
Mar. 6, 1951	1330	40	65.3	Sept. 15, 1961	1435	73	2,100
Apr. 3, 1951	1000	38	237	Oct. 6, 1961	1540	64	52.4
May 1, 1951	1350	64	55.1	Oct. 11, 1961	1525	65	43.0
May 15, 1951	1405	74	37.7	Nov. 14, 1961	1300	50	177
June 5, 1951	0900	65	20.7	Nov. 30, 1961	1150	39	110
July 10, 1951	0815	82	48.6	Jan. 12, 1962	0745	33	88.3
Aug. 7, 1951	1325	83	8.54	Jan. 17, 1962	1230	34	56.1
Oct. 3, 1951	1400	69	26.0	Jan. 31, 1962	0920	33	325
Dec. 4, 1951	1000	46	36.2	Feb. 14, 1962	0900	36	602
May 10, 1952	0850	61	675	Mar. 6, 1962	1005	32	84.6
Oct. 7, 1952	0900	50	.78	Mar. 14, 1962	0900	33	515
Nov. 12, 1952	1420	46	.32	Apr. 4, 1962	1310	50	110
Jan. 6, 1953	1100	35	7.60	May 8, 1962	1320	52	37.0
Feb. 9, 1953	1800	42	25.3	May 16, 1962	0845	66	29.5
Feb. 19, 1953	1125	41	17.7	June 21, 1962	1225	77	8.81
May 5, 1953	0755	49	124	July 25, 1962	1320	79	7.33
June 1, 1953	1500	84	19.7	Aug. 23, 1962	1010	78	2.81
July 7, 1953	0905	80	11.4	Sept. 13, 1962	1515	80	7.27
Sept. 9, 1953	0910	68	.73	Oct. 8, 1962	1500	69	13.7
Nov. 2, 1953	1700	59	.09	Oct. 25, 1962	1515	48	14.4

Temperature and Discharge of North River at Palmyra, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 29, 1962	1145	41	3.70
Dec. 12, 1962	1120	34	3.13
Jan. 8, 1963	1130	33	3.75
Jan. 22, 1963	1605	33	3.01
Jan. 24, 1963	1055	33	2.11
Feb. 7, 1963	1745	33	15.8
Feb. 20, 1963	0930	40	6.41
Mar. 12, 1963	0720	41	68.0
Mar. 20, 1963	1030	36	102
Apr. 4, 1963	0950	56	24.3
May 9, 1963	0940	75	12.8
May 15, 1963	1000	69	68.9
June 6, 1963	0900	86	21.0
June 18, 1963	1445	80	6.76
July 17, 1963	0850	79	15.1
July 24, 1963	1315	71	5.75
Aug. 8, 1963	1315	91	1.70
Aug. 21, 1963	0730	61	22.4
Sept. 6, 1963	0915	73	5.70
Sept. 17, 1963	1125	74	11.5
Oct. 9, 1963	0650	68	.61
Oct. 15, 1963	1420	71	.52
Nov. 7, 1963	1500	52	1.50
Nov. 12, 1963	1430	50	1.00
Dec. 5, 1963	1610	40	2.20
Dec. 11, 1963	1055	36	1.77
Jan. 16, 1964	1430	37	2.21
Jan. 23, 1964	1120	34	22.2
Feb. 6, 1964	1055	33	7.58
Mar. 5, 1964	1535	38	30.4
Mar. 18, 1964	1330	46	41.8
Apr. 2, 1964	1340	51	55.1
Apr. 23, 1964	0820	60	558
June 4, 1964	0935	70	13.1
July 16, 1964	1900	80	16.8
Aug. 12, 1964	0605	80	.88
Aug. 18, 1964	1540	74	.71
Sept. 1, 1964	0900	73	14.6
Sept. 23, 1964	1440	65	13.4
Oct. 6, 1964	1625	58	2.00
Nov. 5, 1964	1255	57	2.01
Dec. 5, 1964	0810	33	9.86
Dec. 16, 1964	1525	34	36.4
Jan. 9, 1965	0805	33	92.5
Jan. 20, 1965	1525	35	28.7
Feb. 2, 1965	1640	33	107
Feb. 16, 1965	1015	36	125
Mar. 11, 1965	1220	36	287
May 6, 1965	0925	71	42.4
June 16, 1965	0930	71	25.1
July 8, 1965	0750	74	61.5
Aug. 6, 1965	0930	79	5.52
Sept. 8, 1965	1035	71	203
Oct. 8, 1965	1210	58	21.4
Nov. 4, 1965	0620	52	11.0
Dec. 9, 1965	1405	39	12.1
Dec. 16, 1965	1620	38	12.2
Jan. 12, 1966	1425	35	20.3
Mar. 1, 1966	1610	40	24.7
Apr. 12, 1966	1045	44	366
May 25, 1966	1010	65	157
July 11, 1966	1520	92	15.0
July 14, 1966	1430	82	11.0
Aug. 4, 1966	1730	80	19.4
Aug. 18, 1966	0945	75	10.6
Sept. 6, 1966	1605	72	30.9
Sept. 21, 1966	1440	62	86.5
Oct. 5, 1966	1025	57	7.00
Oct. 19, 1966	1505	47	32.5
Nov. 8, 1966	1350	51	6.74
Nov. 16, 1966	1115	47	7.55
Dec. 7, 1966	0910	42	287
Dec. 15, 1966	1415	39	40.6
Jan. 23, 1967	1600	35	22.3
Mar. 8, 1967	1225	35	36.6
Apr. 11, 1967	0815	55	218
May 2, 1967	0750	55	246
June 6, 1967	0800	69	53.0
June 22, 1967	0840	73	59.2
July 11, 1967	0800	77	323
Aug. 3, 1967	1230	80	99.7
Sept. 12, 1967	0730	64	9.12
Oct. 9, 1967	1705	59	70.5
Dec. 5, 1967	0850	38	105
Dec. 14, 1967	1455	34	112
Jan. 17, 1968	1545	35	35.5
Feb. 7, 1968	0810	39	125
Mar. 12, 1968	1555	42	43.1
Mar. 22, 1968	0915	40	90.4
Apr. 1, 1968	1750	56	39.2
Apr. 18, 1968	0800	51	129
Apr. 30, 1968	0905	61	44.8
May 9, 1968	1030	64	—
June 4, 1968	0805	74	31.1
July 11, 1968	1100	67	31.4
Oct. 30, 1968	1015	46	9.38
Nov. 21, 1968	1620	37	45.0
Dec. 11, 1968	1210	33	37.5
Feb. 5, 1969	1135	33	446
Apr. 7, 1969	1855	56	581
Apr. 24, 1969	0835	53	154
May 15, 1969	1200	62	108
June 17, 1969	1600	70	46.2
Aug. 5, 1969	1340	77	33.5
Sept. 3, 1969	1305	75	7.96
Sept. 19, 1969	1015	68	24.5

BEAR CREEK BASIN

5-5020. Bear Creek at Hannibal, Mo.

Location.--Lat 39°40'43", long 91°24'33", in SE¼NW¼ sec.1, T.56 N., R.5 W., on right bank 400 ft downstream from upstream bridge on dual U. S. Highway 61 at Hannibal, 4-3/4 miles upstream from mouth.

Drainage area.--31.0 sq mi.

Discharge records available.--October 1938 to September 1942 and October 1947 to September 1969 in reports of Geological Survey.

Maximum temperature measured.--93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 17, 1947	0930	68	0.62	Dec. 7, 1954	0850	40	0.70
Nov. 19, 1947	0730	37	1.68	Jan. 11, 1955	0840	32	3.45
Jan. 13, 1948	1600	33	5.50	Jan. 27, 1955	1610	32	.97
Feb. 16, 1948	1550	34	233	Feb. 25, 1955	1210	38	4.97
Feb. 17, 1948	0730	33	11.2	Mar. 22, 1955	0840	34	4.21
Mar. 25, 1948	1230	59	20.6	Apr. 18, 1955	1805	68	5.83
Apr. 28, 1948	1745	69	4.11	June 13, 1955	1550	69	3.82
July 8, 1948	0800	80	2.69	Oct. 10, 1955	1445	72	1.60
Aug. 10, 1948	0825	73	1.49	Nov. 14, 1955	1500	46	.70
Sept. 11, 1948	1240	74	1.02	Dec, 12, 1955	1650	33	.40
Oct. 6, 1948	1610	61	.66	Jan, 9, 1956	1610	34	.52
Nov. 7, 1948	1320	55	1.47	Feb. 6, 1956	1255	37	1.15
Dec. 6, 1948	0930	34	1.26	Feb. 27, 1956	1340	36	1.44
Jan. 7, 1949	1430	41	2.39	Mar. 26, 1956	1435	43	.61
Mar. 10, 1949	0845	34	7.56	Apr. 26, 1956	0950	48	.70
Apr. 7, 1949	1700	54	7.34	June 18, 1956	1345	92	.07
June 13, 1949	1735	80	3.88	Jan. 7, 1957	1620	40	.11
July 6, 1949	1600	82	2.78	Sept. 23, 1957	1210	56	1.85
Aug. 11, 1949	0740	77	3.50	Jan. 10, 1958	0910	34	3.11
Sept. 7, 1949	0905	70	1.28	Mar. 5, 1958	0950	35	8.68
Oct. 10, 1949	1500	70	7.75	Jan. 5, 1959	1505	32	1.60
Dec. 5, 1949	1445	42	2.39	Feb. 26, 1959	1615	35	14.2
Jan. 10, 1950	1530	38	34.4	July 8, 1959	1330	86	.30
Feb. 6, 1950	1610	33	10.1	Nov. 16, 1959	1400	37	.49
Feb. 28, 1950	1540	47	19.3	Feb. 2, 1960	1325	33	1.42
Apr. 5, 1950	1500	47	33.0	July 14, 1960	0645	74	10.8
May 2, 1950	0800	52	9.09	Jan. 13, 1961	0715	33	.90
May 29, 1950	1640	72	4.01	Feb. 3, 1961	1015	32	.58
June 26, 1950	1745	84	1.21	Feb. 16, 1961	1050	35	7.92
July 31, 1950	1300	80	.93	Mar. 9, 1961	1420	48	18.8
Sept. 5, 1950	1435	76	.73	Apr. 4, 1961	1330	50	6.71
Oct. 2, 1950	1350	70	.39	May 4, 1961	1640	60	5.83
Nov. 8, 1950	1250	44	1.07	May 17, 1961	1445	60	23.9
Dec. 4, 1950	1555	32	1.07	July 18, 1961	1000	72	1.51
Jan. 9, 1951	1030	32	1.29	Aug. 12, 1961	0905	75	18.3
Feb. 5, 1951	1545	32	1.41	Sept. 8, 1961	1330	77	.34
Feb. 6, 1951	1055	34	159	Sept. 14, 1961	1020	75	502
Mar. 5, 1951	1735	36	5.73	Oct. 7, 1961	0855	62	3.26
Apr. 2, 1951	1610	38	15.9	Dec. 1, 1961	0800	46	8.94
May 1, 1951	1045	64	6.01	Jan. 4, 1962	1450	34	23.9
June 21, 1951	1220	84	1.88	Jan. 12, 1962	1000	33	6.50
July 9, 1951	1750	87	3.02	Jan. 30, 1962	1450	33	37.1
Aug. 7, 1951	1045	84	1.33	Mar. 8, 1962	1700	35	12.0
Sept. 4, 1951	1130	74	2.18	Apr. 4, 1962	1625	48	12.6
Oct. 3, 1951	1100	67	2.69	June 12, 1962	1130	72	2.55
Dec. 3, 1951	1635	53	3.97	Oct. 8, 1962	1650	69	1.34
May 9, 1952	1510	66	51.8	Oct. 25, 1962	1500	48	.39
July 24, 1952	1300	90	.77	Nov. 29, 1962	0905	38	.78
Dec. 1, 1952	1615	45	1.38	Jan. 8, 1963	0910	33	.80
Jan. 5, 1953	1530	35	1.13	Feb. 6, 1963	1410	33	6.42
Feb. 9, 1953	1440	46	1.66	Mar. 9, 1963	1555	45	6.74
Apr. 13, 1953	1750	39	5.54	Apr. 4, 1963	1135	57	1.87
May 4, 1953	1510	58	3.62	May 9, 1963	1700	82	1.19
June 1, 1953	1300	82	1.39	June 6, 1963	1135	86	1.00
July 6, 1953	1810	81	.04	July 17, 1963	1050	80	.23
Sept. 8, 1953	1500	79	.04	Sept. 6, 1963	1050	79	.08
Nov. 2, 1953	1410	61	.07	Nov. 6, 1963	0950	56	.08
Nov. 30, 1953	1445	46	.33	Dec. 5, 1963	1540	42	.11
Jan. 5, 1954	0855	34	.78	Jan. 16, 1964	1545	38	.47
Feb. 1, 1954	1730	34	3.21	Feb. 6, 1964	1350	33	.71
Feb. 16, 1954	1255	36	6.02	Mar. 5, 1964	1305	38	11.2
Mar. 30, 1954	1350	47	1.16	May 4, 1964	1250	75	8.22
Apr. 10, 1954	0910	58	1.68	June 4, 1964	1600	70	.92
May 3, 1954	1755	55	9.07	July 10, 1964	1050	76	11.8
June 3, 1954	0845	52	13.0	Aug. 31, 1964	1125	84	.13
Oct. 12, 1954	1510	74	4.06	Nov. 5, 1964	1455	58	.06
Nov. 9, 1954	0820	46	.22	Dec. 5, 1964	1145	33	1.05

BEAR CREEK BASIN

Temperature and Discharge of Bear Creek at Hannibal, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 9, 1965	1115	33	3.72				
Feb. 2, 1965	1520	33	4.34				
Mar. 11, 1965	1505	40	18.7				
May 6, 1965	1225	72	.45				
June 2, 1965	0825	66	4.94				
July 8, 1965	0510	66	3.67				
Aug. 6, 1965	1125	71	58.4				
Sept. 7, 1965	1725	68	209				
Oct. 13, 1965	1355	60	3.13				
Nov. 4, 1965	0905	52	2.10				
Dec. 9, 1965	1640	44	1.85				
Jan. 12, 1966	1240	37	4.08				
Mar. 1, 1966	1350	45	5.91				
Apr. 12, 1966	1255	45	12.9				
May 25, 1966	0815	59	2.27				
July 11, 1966	1720	93	.78				
Aug. 5, 1966	0700	69	1.04				
Nov. 9, 1966	0830	56	1.02				
Dec. 7, 1966	0710	44	19.2				
Jan. 26, 1967	0715	38	1.57				
Mar. 8, 1967	1415	39	2.69				
Apr. 11, 1967	1550	64	6.35				
May 2, 1967	1620	63	7.02				
June 6, 1967	1320	75	3.17				
July 11, 1967	1245	79	10.7				
Aug. 4, 1967	0815	70	3.26				
Sept. 12, 1967	1115	69	.30				
Oct. 10, 1967	0820	51	4.52				
Oct. 31, 1967	1325	49	66.2				
Dec. 5, 1967	1025	40	15.2				
Feb. 6, 1968	1325	40	16.0				
Mar. 13, 1968	0750	34	4.35				
Apr. 2, 1968	1020	49	4.12				
Apr. 30, 1968	1320	68	2.81				
June 4, 1968	1420	81	1.61				
July 11, 1968	1350	81	1.74				
Aug. 22, 1968	0915	80	.59				
Sept. 18, 1968	1635	64	3.79				
Oct. 30, 1968	1250	52	.84				
Dec. 11, 1968	1610	39	2.66				
Feb. 5, 1969	0855	33	20.4				
Mar. 28, 1969	1045	44	26.4				
Apr. 24, 1969	1705	63	13.2				
June 23, 1969	1755	65	20.4				
July 2, 1969	1745	75	131				
Aug. 5, 1969	0900	68	3.68				
Sept. 4, 1969	0830	72	.87				

SALT RIVER BASIN

5-5023. Salt River at Hagers Grove, Mo.

Location.--Lat 39°49'40", long 92°14'10", in NE¼SW¼ sec.15, T.58 N., R.12 W., at bridge on county highway C, 1/4 mile west of Hagers Grove, and 2½ miles upstream from Ten Mile Creek.

Drainage area.--365 sq mi.

Discharge records available.--Discharge measurements and gage-height record available October 1939 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
June 10, 1946	0935	82	6.40				
Sept. 24, 1946	0825	65	62.7				
Apr. 10, 1949	1325	50	46.6				
May 7, 1949	1205	72	19.3				
Dec. 8, 1949	0815	34	4.61				
June 4, 1963	1045	80	7.93				
Oct. 3, 1963	0850	70	.76				
Feb. 4, 1964	1310	33	9.01				
June 5, 1964	1455	64	18.9				
Aug. 5, 1964	1340	80	1.15				
Dec. 1, 1964	1625	33	6.85				
Apr. 6, 1965	1030	59	591				
May 4, 1965	1145	77	32.2				

SALT RIVER BASIN

5-5025. Salt River near Shelbina, Mo.

Location.--Lat 39°44'29", long 92°02'26", in SW¼NE¼ sec.17, T.57 N., R.10 W., on right bank on downstream side of right pier of bridge on State Highway 15, 3 miles north of Shelbina, and 15 miles upstream from Black Creek.

Drainage area.--481 sq mi.

Discharge records available.--April 1930 to September 1969 (fragmentary prior to October 1933). Monthly discharge only for period October 1933 to February 1934, published in WSP 1308.

Maximum temperature measured.--90° Fahrenheit.

Temperature and discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 16, 1945	0825	76	33.6	May 19, 1955	1435	72	83.0
Oct. 27, 1945	0840	49	7.70	June 20, 1955	1755	78	204
Apr. 24, 1946	1000	61	362	June 29, 1955	1055	77	42.5
June 10, 1946	1600	81	7.69	Sept. 15, 1955	1610	69	,12
July 13, 1946	0605	80	2.08	Oct. 13, 1955	1630	63	16.9
Aug. 14, 1946	1430	72	15.9	Nov. 17, 1955	0930	34	2.77
Sept. 25, 1946	1250	64	68.1	Dec. 15, 1955	0920	33	1.04
Oct. 24, 1946	0750	59	25.8	Jan. 11, 1956	1410	38	1.88
Dec. 6, 1946	1505	41	10.4	Feb. 9, 1956	0920	35	2.97
Jan. 6, 1947	1525	31	14.4	Mar. 1, 1946	1110	36	19.0
Feb. 8, 1947	0950	34	24.3	Apr. 23, 1956	1515	48	1.13
July 23, 1947	1025	69	9.18	June 20, 1956	0835	74	12.4
Oct. 15, 1947	0730	68	2.22	Jan. 10, 1957	1000	36	1.39
Jan. 16, 1948	0815	34	146	Jan. 7, 1958	0950	33	58.5
May 1, 1948	1130	63	44.1	Apr. 2, 1958	1420	48	45.9
June 5, 1948	0800	78	5.12	May 12, 1958	1500	68	68.4
July 11, 1948	1245	83	10.1	June 17, 1958	1400	70	117
Aug. 14, 1948	1420	76	32.6	Jan. 8, 1959	0830	32	3.81
Sept. 9, 1948	1100	66	16.6	June 10, 1959	0910	80	21.5
Oct. 9, 1948	1240	57	9.75	Nov. 19, 1959	0750	39	9.46
Dec. 4, 1948	0930	38	4.35	July 12, 1960	1215	70	3,460
Jan. 5, 1949	1200	35	41.3	Dec. 22, 1960	1510	33	3.00
Feb. 4, 1949	0845	33	39.9	Jan. 10, 1961	1100	33	4.24
Mar. 12, 1949	1345	39	128	Jan. 31, 1961	1250	34	.83
Apr. 10, 1949	1520	52	69.6	Feb. 14, 1961	1000	35	178
May 7, 1949	1555	74	30.7	Apr. 6, 1961	0820	51	88.6
July 9, 1949	1345	84	301	May 2, 1961	1625	59	85.7
Aug. 15, 1949	1210	77	109	May 18, 1961	1645	60	256
Sept. 12, 1949	1550	66	71.3	July 12, 1961	1230	78	3.14
Dec. 7, 1949	1600	34	8.51	Aug. 8, 1961	1410	85	3.57
Jan. 15, 1950	1050	33	1,900	Sept. 6, 1961	1330	75	27.7
Feb. 9, 1950	0750	35	133	Oct. 3, 1961	1530	56	170
Mar. 2, 1950	1740	34	135	Jan. 9, 1962	0715	33	326
May 4, 1950	1330	66	82.5	Feb. 8, 1962	0655	33	2,780
June 1, 1950	0750	70	98.8	Mar. 1, 1962	1205	32	192
June 28, 1950	1725	77	43.5	Apr. 2, 1962	1030	40	136
Aug. 3, 1950	1100	76	6.22	May 2, 1962	1340	51	42.3
Sept. 8, 1950	1710	70	9.94	Aug. 8, 1962	0745	63	30.5
Oct. 5, 1950	1355	64	4.08	Oct. 2, 1962	1335	61	5.13
Nov. 10, 1950	1650	32	3.04	Oct. 3, 1962	0805	60	2.08
Dec. 7, 1950	1430	32	2.89	Oct. 23, 1962	1135	55	105
Jan. 11, 1951	1230	32	2.82	Jan. 3, 1963	1510	33	3.20
Feb. 8, 1951	1355	32	79.6	Feb. 7, 1963	0900	35	3.28
Mar. 8, 1951	1335	36	57.6	Apr. 2, 1963	1030	59	52.3
May 16, 1951	1340	72	52.2	May 2, 1963	0825	57	13.9
June 19, 1951	1050	76	19.9	June 4, 1963	0735	80	12.5
Dec. 27, 1951	0945	32	21.2	July 10, 1963	0830	74	28.2
Jan. 16, 1952	1015	33	280	Aug. 6, 1963	1205	84	.34
Sept. 18, 1952	1345	75	1.00	Sept. 4, 1963	1420	80	2.93
Oct. 8, 1952	1230	55	0	Oct. 2, 1963	1235	65	.33
Nov. 7, 1952	1215	40	.50	Nov. 5, 1963	1515	55	.45
Dec. 4, 1952	1430	30	5.64	Dec. 3, 1963	1410	40	2.91
Jan. 7, 1953	1700	33	1.73	Jan. 15, 1964	0915	36	.55
June 3, 1953	1000	78	11.0	Feb. 4, 1964	1110	33	7.69
Feb. 18, 1954	0900	38	9.32	Feb. 18, 1964	1135	35	3.78
May 5, 1954	1610	59	188	Mar. 4, 1964	1240	39	4.80
June 7, 1954	1410	84	99.2	Mar. 31, 1964	1340	44	61.1
July 8, 1954	1745	85	1.25	June 5, 1964	1300	65	9.83
Aug. 4, 1954	1500	85	.35	July 7, 1964	1320	81	8.92
Sept. 14, 1954	1235	74	1.72	Aug. 5, 1964	1155	80	.46
Nov. 12, 1954	0905	50	4.94	Sept. 9, 1964	0720	74	100
Dec. 8, 1954	1520	42	4.75	Oct. 2, 1964	1000	63	12.5
Jan. 4, 1955	1200	34	109	Nov. 4, 1964	0805	67	.24
Jan. 25, 1955	0955	33	22.9	Dec. 1, 1964	1335	34	3.97
Apr. 21, 1955	1025	70	63.3	Jan. 6, 1965	0810	38	343

Temperature and Discharge of Salt River near Shelbina, Mo.--Continued

Date	Time	Water Temp (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 4, 1965	0810	33	43.9				
Apr. 8, 1965	0645	59	3,680				
May 4, 1965	0940	69	43.4				
June 1, 1965	1625	69	15.7				
July 7, 1965	0705	74	37.0				
Aug. 4, 1965	0805	75	4.06				
Sept. 1, 1965	1510	72	34.9				
Oct. 5, 1965	1535	60	19.5				
Nov. 2, 1965	1015	50	8.46				
Dec. 7, 1965	1340	40	6.12				
Jan. 5, 1966	1305	41	79.8				
Feb. 28, 1966	1015	34	15.8				
Apr. 14, 1966	0820	46	61.8				
July 12, 1966	1505	90	6.50				
Aug. 3, 1966	0920	73	15.3				
Sept. 8, 1966	1025	67	2.26				
Oct. 6, 1966	0750	53	.58				
Nov. 7, 1966	1125	46	2.53				
Jan. 24, 1967	1620	35	23.3				
Feb. 3, 1967	0610	33	85.3				
Mar. 6, 1967	1545	37	43.8				
Apr. 12, 1967	1435	53	167				
May 3, 1967	1340	56	65.5				
July 12, 1967	1315	81	99.5				
Aug. 1, 1967	1325	76	260				
Sept. 13, 1967	1625	69	6.80				
Oct. 10, 1967	1645	53	88.0				
Dec. 6, 1967	1500	41	144				
Feb. 9, 1968	0815	34	90.1				
Mar. 14, 1968	0745	38	37.8				
Apr. 13, 1968	1150	53	87.0				
May 1, 1968	1440	70	64.2				
June 5, 1968	1410	85	17.5				
July 8, 1968	1945	82	14.2				
Aug. 8, 1968	1230	78	218				
Sept. 17, 1968	0905	62	33.5				
Oct. 28, 1968	1635	47	10.8				
Feb. 19, 1969	1700	34	129				
Mar. 12, 1969	0940	33	74.5				
June 4, 1969	1100	63	271				
July 11, 1969	1535	80	13,300				
Aug. 4, 1969	1535	77	32.6				
Sept. 3, 1969	1550	73	8.93				

SALT RIVER BASIN

5-5044. South Fork Salt River at Mexico, Mo.

Location.--NW¼ sec.24, T.51 N., R.9 W., at bridge on County Highway J, 1/4 mile north of Mexico, Audrian County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 2, 1961	1320	60	8.47				
May 16, 1962	2120	59	1.87				
June 21, 1962	1215	70	2.99				
Aug. 22, 1962	1220	90	1.13				
Nov. 8, 1962	1230	50	.98				
Aug. 14, 1963	1010	69	.66				
Oct. 1, 1963	0640	63	.93				
Nov. 5, 1963	1030	55	1.05				
Oct. 19, 1964	0940	48	.85				
Sept. 13, 1967	0845	69	.47				

5-5049. South Fork Salt River near Santa Fe, Mo.

Location.--Lat 39°19'55", long 91°48'10", in SW¼NE¼ sec.33, T.53 N., R.8 W., Audrain County, on right bank on downstream side near bridge on county road, just downstream from confluence with Littleby Creek, 2.5 miles south and about 1 mile east of Santa Fe, at mile 102.5.

Drainage area.--295 sq mi. Area at site used prior to Oct. 1, 1968, 298 sq mi.

Discharge records available.--October 1939 to September 1969.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 17, 1945	0730	74	4.40	Apr. 21, 1955	1405	70	15.5
Oct. 27, 1945	1545	53	8.57	June 20, 1955	1000	74	3.98
Apr. 23, 1946	1110	61	20.3	Sept. 16, 1955	1245	67	2.82
June 11, 1946	1130	83	5.79	Oct. 17, 1955	1105	59	21.7
Aug. 13, 1946	1150	73	1.24	Nov. 17, 1955	1340	34	1.70
Sept. 27, 1946	0900	74	.11	Dec. 15, 1955	1340	33	2.27
Oct. 23, 1946	1000	56	9.86	Feb. 9, 1956	1415	36	3.09
Dec. 8, 1946	0900	45	7.85	Mar. 1, 1956	1615	38	8.95
Jan. 7, 1947	1430	37	7.78	June 20, 1956	1510	72	132
Feb. 9, 1947	1540	34	7.84	Aug. 14, 1956	1305	70	5.96
Mar. 16, 1947	1240	35	191	Jan. 11, 1957	1215	41	1.73
May 19, 1947	1515	75	18.5	Feb. 4, 1957	1425	34	2.47
July 22, 1947	1015	70	6.86	May 6, 1957	1130	60	30.4
Oct. 14, 1947	1500	75	.54	Aug. 26, 1957	1155	78	.97
Jan. 17, 1948	0800	33	5.68	Dec. 2, 1957	1200	33	1.16
Mar. 29, 1948	1530	54	108	Jan. 6, 1958	1110	34	4.93
May 2, 1948	1030	64	78.8	Aug. 6, 1958	1610	82	57.0
June 6, 1948	1210	72	1.28	Jan. 8, 1959	1435	32	4.93
July 12, 1948	1610	84	97.5	Nov. 13, 1959	1230	41	2.49
Sept. 8, 1948	1200	68	3.05	Jan. 11, 1960	1235	38	5.51
Oct. 10, 1948	1205	56	8.07	Feb. 8, 1960	1310	40	120
Nov. 4, 1948	1215	58	209	Mar. 7, 1960	1140	33	7.36
Mar. 13, 1949	1430	42	86	July 11, 1960	0920	70	10.0
Apr. 11, 1949	1635	61	53.8	Jan. 9, 1961	1130	33	2.01
May 8, 1949	1045	70	25.7	Jan. 30, 1961	1400	33	1.48
June 17, 1949	1010	79	12.3	Feb. 13, 1961	1200	35	109
July 10, 1949	1735	78	31.3	Mar. 6, 1961	1425	46	20.7
Aug. 18, 1949	0840	81	9.5	Apr. 7, 1961	0720	52	45.1
Oct. 13, 1949	1515	63	18.2	May 18, 1961	0850	60	354
Dec. 9, 1949	1345	33	9.3	May 24, 1961	1110	64	32.2
Feb. 9, 1950	1600	34	47.4	June 12, 1961	1235	82	39.6
Apr. 8, 1950	1500	58	99.1	July 10, 1961	1455	78	19.8
May 5, 1950	1035	67	38.3	Aug. 7, 1961	1430	82	25.3
June 1, 1950	1640	70	93	Sept. 9, 1961	1430	78	140
June 29, 1950	1425	75	7.50	Sept. 14, 1961	1340	65	3,970
Aug. 4, 1950	0900	76	2.33	Oct. 2, 1961	1540	57	34.7
Sept. 4, 1950	1045	72	14.3	Nov. 27, 1961	1430	46	74.5
Oct. 6, 1950	1100	62	6.88	Jan. 7, 1962	1010	33	112
Nov. 11, 1950	1715	32	5.21	Jan. 30, 1962	1635	33	1,160
Dec. 8, 1950	1510	32	1.78	Apr. 1, 1962	0940	50	58.1
Jan. 12, 1951	1035	32	5.32	May 1, 1962	1255	47	21.2
Feb. 7, 1951	1520	32	129	June 4, 1962	1505	75	5.98
Mar. 9, 1951	1345	35	49.9	Sept. 4, 1962	1455	73	.13
May 17, 1951	0945	71	22.9	Oct. 1, 1962	1410	62	1.16
Oct. 17, 1951	0935	58	13.8	Oct. 22, 1962	1310	60	4.88
Dec. 28, 1951	1210	33	26.5	Jan. 3, 1963	0710	33	1.50
May 12, 1952	1145	58	32.4	Feb. 4, 1963	1600	33	1.96
Sept. 18, 1952	1825	70	.35	Mar. 11, 1963	1355	42	56.3
Oct. 8, 1952	1600	60	0	Apr. 1, 1963	1340	62	3.19
Dec. 5, 1952	1140	40	4.55	Apr. 30, 1963	1335	62	18.8
Jan. 8, 1953	1710	33	2.03	June 3, 1963	1145	70	12.1
May 8, 1953	1030	60	143	July 8, 1963	1420	79	113
June 3, 1953	1435	84	5.48	Aug. 5, 1963	1310	91	.18
Nov. 5, 1953	0915	44	.02	Sept. 3, 1963	1130	82	.10
Nov. 30, 1953	1235	42	1.15	Dec. 2, 1963	1430	39	.95
Jan. 11, 1954	1120	35	1.32	Jan. 14, 1964	1225	36	2.04
Feb. 4, 1954	0855	34	6.19	Feb. 3, 1964	1405	33	2.51
Mar. 1, 1954	1235	43	1.45	Feb. 17, 1964	1345	37	3.70
Apr. 7, 1954	1325	72	20.0	Mar. 3, 1964	1415	51	1.31
May 3, 1954	1150	56	83.9	Mar. 30, 1964	1530	41	12.6
June 7, 1954	1030	74	21.1	Apr. 24, 1964	0950	60	612
July 9, 1954	1245	88	.32	May 6, 1964	0715	72	17.6
Nov. 15, 1954	1415	52	.34	June 3, 1964	1235	69	29.1
Dec. 9, 1954	1350	39	3.59	July 6, 1964	1355	85	21.6
Jan. 3, 1955	1600	36	116	Aug. 4, 1964	1320	85	1.53
Jan. 24, 1955	1335	33	4.43	Oct. 1, 1964	1105	66	.51
Mar. 28, 1955	1130	38	48.6	Nov. 3, 1964	1140	66	0

SALT RIVER BASIN

Temperature and Discharge of South Fork Salt River at Santa Fe, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 30, 1964	1445	33	35.1				
Jan. 4, 1965	1615	33	18.5				
Feb. 4, 1965	1515	33	6.11				
Mar. 3, 1965	1310	33	252				
Apr. 7, 1965	0830	58	2,680				
May 3, 1965	1210	70	27.6				
May 27, 1965	1435	73	5.09				
July 6, 1965	1210	75	3.79				
Aug. 3, 1965	1130	82	1.71				
Aug. 31, 1965	1535	70	70.1				
Sept. 1, 1965	0730	67	29.2				
Oct. 4, 1965	1315	59	9.71				
Nov. 2, 1965	0700	48	5.03				
Dec. 7, 1965	0840	36	3.28				
Jan. 3, 1966	1505	42	17.2				
Feb. 28, 1966	1415	37	15.7				
Apr. 13, 1966	0955	44	244				
May 24, 1966	0935	66	68.4				
July 12, 1966	1050	85	1.36				
Aug. 2, 1966	1415	82	2.27				
Dec. 6, 1966	1405	43	1.69				
Jan. 24, 1967	1130	39	1.79				
Mar. 9, 1967	0935	34	14.0				
Apr. 12, 1967	1000	54	42.5				
May 2, 1967	1210	59	78.2				
June 7, 1967	0910	73	14.6				
July 11, 1967	1455	78	157				
July 31, 1967	1520	87	43.4				
Sept. 12, 1967	1455	71	.62				
Oct. 10, 1967	1340	54	10.4				
Nov. 1, 1967	0900	47	434				
Mar. 13, 1968	1250	43	16.0				
Feb. 5, 1968	1430	40	135				
May 1, 1968	1025	65	8.92				
Apr. 2, 1968	1430	54	12.1				
June 5, 1968	1100	77	34.6				
July 12, 1968	1340	79	16.6				
Aug. 7, 1968	1450	79	64.2				
Sept. 27, 1968	1215	65	69.3				
Oct. 31, 1968	1010	48	8.39				
Feb. 19, 1969	1035	34	52.4				
Apr. 9, 1969	1145	58	158				
Apr. 25, 1969	0950	56	60.7				
June 11, 1969	1835	72	57.2				
Aug. 19, 1969	1715	84	14.7				

SALT RIVER BASIN

5-5060. Younge Creek near Mexico, Mo.

Location.--Lat 39°18'40", long 91°56'40", in NW¼SW¼ sec.5, T.52 N., R.9 W., on downstream side of bridge on State Highway 15, 6 miles upstream from Long Branch, and 11 miles north of Mexico.

Drainage area.--67.4 sq mi.

Discharge records available.--April 1930 to September 1969. (Fragmentary prior to August 1936).

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp (°F)	Discharge (cfs)	Date	Time	Water Temp (°F)	Discharge (cfs)
Aug. 17, 1945	1010	76	.33	July 3, 1956	1250	74	125
Oct. 28, 1945	1300	54	1.28	Apr. 8, 1957	1120	40	358
Apr. 23, 1946	0900	61	10.0	May 6, 1957	0905	54	2.52
June 11, 1946	1700	84	.32	Jan. 6, 1958	1015	33	.61
Oct. 22, 1946	0910	69	2.31	May 9, 1958	0755	60	12.2
Dec. 8, 1946	1115	54	1.12	Nov. 4, 1958	1050	57	.05
Jan. 7, 1947	1300	33	1.62	Jan. 9, 1959	1040	32	.58
Feb. 10, 1947	0825	33	.71	May 1, 1959	1105	69	5.06
Mar. 16, 1947	1510	35	31.9	May 19, 1959	0835	62	36.9
Apr. 10, 1947	0800	54	12.6	June 8, 1959	1430	78	1.06
May 20, 1947	0700	67	6.22	Nov. 13, 1959	1350	37	.04
July 22, 1947	0840	70	.57	Jan. 11, 1960	1100	39	.35
Nov. 23, 1947	1005	36	.64	Mar. 7, 1960	1420	33	.51
Jan. 16, 1948	1545	33	1.19	July 1, 1960	1620	71	.56
Feb. 19, 1948	1625	35	48.2	July 11, 1960	0525	70	.85
Mar. 30, 1948	0915	49	10.1	Jan. 9, 1961	0750	33	.36
May 2, 1948	1750	66	5.13	Feb. 13, 1961	1035	37	28.9
June 5, 1948	1410	86	0	Mar. 6, 1961	1130	38	92.7
July 13, 1948	0830	82	.66	Apr. 7, 1961	0940	52	5.85
Aug. 16, 1948	0920	70	.11	May 17, 1961	1415	60	34.2
Sept. 8, 1948	1000	71	.20	June 12, 1961	0935	76	6.70
Jan. 4, 1949	1140	34	5.33	July 10, 1961	1230	76	.48
Feb. 6, 1949	1340	34	5.58	Aug. 7, 1961	1215	80	1.67
Apr. 12, 1949	1440	60	26.2	Sept. 5, 1961	1215	72	15.7
June 17, 1949	1130	80	7.28	Sept. 25, 1961	1655	72	1,960
July 11, 1949	1535	81	6.27	Oct. 2, 1961	1005	60	5.11
Aug. 17, 1949	1200	80	2.14	Nov. 27, 1961	1145	45	12.0
Oct. 14, 1949	1045	58	.82	Jan. 6, 1962	1355	33	66.0
Dec. 8, 1949	1530	35	1.31	Jan. 30, 1962	0745	32	638
Jan. 17, 1950	0830	32	23.6	Feb. 7, 1962	1230	33	23.0
Feb. 9, 1950	1430	45	11.4	Feb. 27, 1962	1605	32	135
Apr. 7, 1950	1630	57	18.2	Mar. 31, 1962	1420	50	8.41
May 5, 1950	0855	67	4.66	May 1, 1962	1035	48	2.02
June 1, 1950	1440	73	19.6	June 4, 1962	1310	73	3.26
June 29, 1950	1155	72	.71	Oct. 1, 1962	1040	63	.07
Aug. 4, 1950	0635	76	.07	Oct. 22, 1962	1135	60	2.57
Sept. 9, 1950	1300	7[illegible]	.27	Jan. 2, 1963	1135	33	.32
Jan. 12, 1951	0830	32	.02	Feb. 4, 1963	1430	35	.12
Feb. 7, 1951	1625	32	5.70	Mar. 11, 1963	1215	47	12.1
Mar. 9, 1951	1520	38	5.10	Apr. 1, 1963	1145	64	39.4
May 17, 1951	0735	70	1.98	Apr. 30, 1963	1240	58	70.6
June 20, 1951	1015	78	5.65	June 3, 1963	1000	70	.94
Oct. 17, 1951	1050	58	1.99	July 8, 1963	1230	78	3.66
Dec. 28, 1951	0930	32	3.07	Sept. 3, 1963	1000	82	.11
May 12, 1952	1400	60	6.84	Feb. 3, 1964	1225	33	.32
Oct. 9, 1952	0715	33	0	Feb. 17, 1964	1155	39	.67
Dec. 5, 1952	1500	48	.73	Mar. 3, 1964	1210	53	.25
June 3, 1953	1645	84	.48	Mar. 30, 1964	1400	40	.70
Apr. 7, 1954	1035	74	0	Apr. 24, 1964	1215	60	72.7
May 3, 1954	0955	46	61.8	May 5, 1964	0735	70	2.68
June 7, 1954	0810	63	3.74	June 3, 1964	1045	70	2.15
Dec. 9, 1954	1510	39	.13	July 6, 1964	1135	83	.42
Jan. 3, 1955	1400	37	52.9	Nov. 30, 1964	1230	33	7.69
Jan. 24, 1955	1105	34	.70	Jan. 4, 1965	1410	33	10.5
Feb. 21, 1955	1125	38	51.4	Feb. 4, 1965	1615	33	1.30
Mar. 25, 1955	1225	40	34.4	Mar. 2, 1965	1535	33	223
Apr. 22, 1955	0735	70	3.79	Apr. 6, 1965	1305	62	1,890
June 17, 1955	1315	80	1.0[illegible]	May 3, 1965	1040	70	2.38
Oct. 14, 1955	1030	63	14.7	May 27, 1965	1235	73	1.04
Nov. 17, 1955	1435	38	.05	July 6, 1965	1045	76	.58
Dec. 16, 1955	1130	33	.11	Aug. 3, 1965	1010	74	.02
Feb. 10, 1956	0915	35	.96	Aug. 31, 1965	1335	70	3.73
Mar. 2, 1956	0900	38	1.34	Sept. 22, 1965	0735	65	1,060
Apr. 23, 1956	1020	49	.09	Oct. 4, 1965	1135	59	1.01
May 24, 1956	1300	70	4.90	Dec. 6, 1965	1245	41	.58
June 21, 1956	1110	75	4.52	Jan. 3, 1966	1310	42	3.83

SALT RIVER BASIN

Temrerature and Discharge of Youngs Creek near Mexico, Mo.--Continued

Date	Time	Water Temr. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 28, 1966	1535	38	4.46				
Apr. 13, 1966	0845	43	44.2				
May 24, 1966	0815	63	47.7				
July 12, 1966	1255	90	.04				
Aug. 2, 1966	1600	78	1.55				
Nov. 9, 1966	1525	56	.06				
Dec. 6, 1966	1225	44	.62				
Jan. 24, 1967	1330	45	.72				
Mar. 9, 1967	0815	34	6.20				
Apr. 12, 1967	0815	54	7.75				
May 2, 1967	1310	59	9.98				
June 7, 1967	0755	70	2.46				
July 11, 1967	1810	79	32.2				
July 31, 1967	1710	84	5.07				
Oct. 11, 1967	1345	53	2.59				
Nov. 1, 1967	1055	49	105				
Dec. 6, 1967	1345	41	205				
Feb. 5, 1968	1200	39	24.9				
Mar. 13, 1968	1505	43	3.50				
Apr. 3, 1968	0830	53	4.00				
May 1, 1968	0840	63	1.34				
June 5, 1968	0825	71	4.13				
July 12, 1968	1430	76	7.36				
Aug. 5, 1968	1630	79	9.76				
Sept. 27, 1968	0930	61	14.4				
Oct. 31, 1968	1345	61	1.06				
Feb. 19, 1969	1205	36	9.89				
Apr. 9, 1969	1300	60	24.4				
Apr. 25, 1969	0835	55	8.54				
June 11, 1969	1600	72	13.4				
Aug. 18, 1969	1610	79	2.35				

SALT RIVER BASIN

5-5065. Middle Fork Salt River at Paris, Mo.

Location.--Lat 39°29'00", long 91°59'50", in SW¼SW¼ sec.2, T.54 N., R.10 W., on right bank on downstream side of Wabash Railroad bridge in Paris, 12½ miles upstream from Elk Fork Salt River, and at mile 104.6 above mouth of Salt River.

Drainage area.--356 sq mi.

Discharge records available.--October 1939 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 16, 1945	1600	76	32.1	Jan. 6, 1958	1630	33	32.7
Oct. 28, 1945	0940	53	9.48	Apr. 2, 1958	1200	49	44.4
June 11, 1946	1405	81	7.70	May 12, 1958	1230	65	58.0
Aug. 14, 1946	0735	71	8.36	June 17, 1958	0815	70	184
Oct. 1, 1946	1645	58	5.12	Aug. 7, 1958	0825	80	74.4
Oct. 23, 1946	0710	55	32.3	Jan. 9, 1959	0915	32	5.45
Dec. 7, 1946	1000	43	12.2	Feb. 24, 1959	1220	35	103
Feb. 9, 1947	0825	33	21.4	May 1, 1959	0900	62	199
July 23, 1947	0840	69	7.57	Nov. 19, 1959	1005	44	2.18
Oct. 14, 1947	1030	65	5.14	Jan. 11, 1960	1620	40	12.6
Jan. 16, 1948	1230	34	102	Feb. 8, 1960	1455	33	196
Feb. 20, 1948	0830	32	251	July 11, 1960	1220	70	34.9
May 1, 1948	1645	68	36.0	Dec. 20, 1960	0920	36	2.88
July 11, 1948	1520	84	4.83	Jan. 10, 1961	0755	33	2.24
Aug. 14, 1948	1720	72	23.8	Jan. 31, 1961	0950	35	1.28
Oct. 10, 1948	0840	55	8.69	Feb. 13, 1961	1600	36	76.8
Dec. 2, 1948	1515	37	7.16	Apr. 6, 1961	1100	51	99.2
Jan. 5, 1949	1050	33	45.9	May 2, 1961	0910	56	73.3
Feb. 5, 1949	0800	36	46.1	May 6, 1961	1725	48	506
Mar. 13, 1949	0710	39	72.0	May 18, 1961	1725	60	121
Apr. 11, 1949	0905	50	61.8	July 11, 1961	1240	73	3.14
May 8, 1949	0640	69	30.6	Aug. 8, 1961	1130	79	22.1
Aug. 17, 1949	0850	78	15.2	Sept. 5, 1961	1725	70	274
Oct. 14, 1949	0805	58	4.40	Oct. 3, 1961	0625	60	283
Dec. 8, 1949	1145	36	8.90	Nov. 27, 1961	1735	48	147
Feb. 9, 1950	1015	35	58.7	Jan. 7, 1962	1400	33	1,030
May 4, 1950	1650	67	44.8	Feb. 28, 1962	1125	32	166
June 29, 1950	0930	72	18.6	Apr. 2, 1962	0600	46	49.3
Aug. 3, 1950	1400	77	6.61	May 2, 1962	0750	54	58.1
Oct. 5, 1950	1530	59	.16	June 5, 1962	1400	70	112
Nov. 11, 1950	1035	33	.94	Aug. 7, 1962	0840	62	69.1
Dec. 7, 1950	1645	32	1.88	Oct. 2, 1962	1015	61	30.1
Jan. 11, 1951	1510	32	3.53	Oct. 23, 1962	0900	57	90.1
Feb. 8, 1951	1110	32	9.46	Jan. 3, 1963	1225	33	4.37
Mar. 8, 1951	1545	36	46.8	Feb. 5, 1963	1405	36	3.47
May 16, 1951	1650	72	30.9	Apr. 2, 1963	0735	59	296
June 19, 1951	1600	75	10.1	May 1, 1963	1100	57	88.5
Dec. 27, 1951	1435	33	19.5	June 4, 1963	1725	80	14.6
Sept. 18, 1952	1715	70	5.63	July 9, 1963	0845	75	19.3
Oct. 18, 1952	1730	56	0	Aug. 6, 1963	0845	78	1.64
Nov. 7, 1952	1015	40	1.00	Sept. 3, 1963	1610	80	1.13
Dec. 4, 1952	1550	30	14.8	Oct. 2, 1963	1700	64	3.06
June 4, 1953	0900	80	11.1	Nov. 4, 1963	1430	51	.43
Jan. 11, 1954	1620	35	1.39	Dec. 3, 1963	0845	37	1.82
Feb. 4, 1954	1110	34	1.11	Jan. 15, 1964	1600	38	2.71
July 9, 1954	0855	79	.32	Feb. 3, 1964	1555	33	3.28
Sept. 13, 1954	1515	72	.85	Feb. 18, 1964	0840	39	2.50
Nov. 15, 1954	1050	48	2.36	Mar. 3, 1964	1615	48	1.54
Dec. 9, 1954	1230	38	15.6	Mar. 31, 1964	1205	41	100
Jan. 24, 1955	1605	34	18.2	May 5, 1964	1645	72	55.2
Apr. 21, 1955	1640	74	34.0	June 5, 1964	1050	65	21.8
May 20, 1955	0750	62	47.8	July 7, 1964	1010	81	3.26
June 20, 1955	1540	76	62.6	Aug. 5, 1964	1735	84	.88
Sept. 19, 1955	1300	69	1.78	Sept. 8, 1964	1310	82	1.47
Oct. 17, 1955	1300	56	5.72	Oct. 1, 1964	1305	62	8.81
Nov. 18, 1955	0750	38	1.37	Nov. 3, 1964	1500	68	.28
Dec. 16, 1955	0920	33	1.94	Dec. 1, 1964	1740	33	17.3
Jan. 12, 1956	0850	33	2.05	Jan. 5, 1965	0615	36	2,720
Feb. 9, 1956	1355	37	1.63	Feb. 4, 1965	1345	33	35.0
Mar. 2, 1956	0745	36	4.31	Apr. 7, 1965	1610	55	3,190
Mar. 29, 1956	1120	40	1.61	May 3, 1965	1525	71	28.5
Apr. 23, 1956	1330	47	.28	May 27, 1965	1530	73	7.40
June 21, 1956	0845	72	59.8	July 6, 1965	1620	75	88.3
Jan. 10, 1957	1605	38	1.58	Aug. 4, 1965	1740	75	5.78
Feb. 4, 1957	1645	36	6.00	Sept. 1, 1965	0900	68	8.56
May 6, 1957	1725	63	18.5	Oct. 5, 1965	0900	56	17.2
Aug. 26, 1957	1415	78	3.11	Dec. 7, 1965	1050	39	5.82
Dec. 2, 1957	1430	32	15.5	Jan. 4, 1966	1000	39	25.5

SALT RIVER BASIN

Temperature and Discharge of Middle Fork Salt River at Paris, Mo.

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 13, 1966	1445	46	179				
July 12, 1966	1345	87	5.46				
Aug. 3, 1966	0655	73	39.8				
Sept. 7, 1966	1530	70	23.3				
Oct. 4, 1966	1340	60	1.03				
Nov. 10, 1966	0925	45	13.4				
Jan. 24, 1967	1425	40	23.8				
Feb. 2, 1967	1425	33	130				
Mar. 6, 1967	1355	38	44.8				
Apr. 12, 1967	1145	54	145				
May 3, 1967	1135	55	142				
June 7, 1967	1035	71	24.8				
Aug. 1, 1967	1100	76	107				
Sept. 13, 1967	0955	69	2.5				
Oct. 10, 1967	1500	56	41				
Feb. 5, 1968	1525	39	262				
Mar. 13, 1968	1615	43	36.6				
Apr. 3, 1968	0945	54	39.6				
May 1, 1968	1155	65	37.5				
June 5, 1968	1230	75	17.1				
July 8, 1968	0950	76	5.11				
Nov. 1, 1968	1305	52	11.5				
Feb. 19, 1969	1340	36	83.3				
Apr. 8, 1969	1600	56	798				
June 12, 1969	1535	72	58.1				
July 12, 1969	1200	80	2,880				
Aug. 20, 1969	1520	79	19.7				

SALT RIVER BASIN

5-5070. Elk Fork Salt River near Paris, Mo.

Location.—Lat 39°26'25", long 92°00'05", in SE¼SE¼ sec. 22, T.54 N., R.10 W., on left bank on upstream side of bridge on State Highway 15, 2½ miles south of Paris and 11 miles upstream from mouth.

Drainage area.—262 sq mi.

Discharge records available.—April 1930 to September 1954 (fragmentary prior to February 1935) (discontinued).

Maximum temperature measured.—84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 16, 1945	1430	80	13.2				
Oct. 28, 1945	1150	56	4.92				
Apr. 23, 1946	1330	61	46.9				
June 11, 1946	1545	83	3.68				
Aug. 13, 1946	1340	72	2.04				
Sept. 27, 1946	1445	74	.27				
Oct. 22, 1946	1105	61	15.5				
Dec. 7, 1946	1240	47	8.42				
Jan. 7, 1947	1020	32	9.95				
Feb. 9, 1947	1020	33	9.53				
Mar. 16, 1947	0940	34	159				
May 19, 1947	0630	67	144				
July 23, 1947	0640	67	6.40				
Sept. 16, 1947	1200	77	.08				
Oct. 14, 1947	0920	65	.93				
Nov. 22, 1947	1100	38	10.4				
Jan. 16, 1948	1410	34	28.9				
Feb. 20, 1948	1000	34	87.5				
Mar. 30, 1948	0645	48	92.8				
May 2, 1948	0730	64	20.4				
June 5, 1948	1230	79	2.72				
July 12, 1948	0755	81	4.96				
Sept. 9, 1948	0915	64	143				
Oct. 10, 1948	0930	56	11.8				
Nov. 4, 1948	0900	55	162				
Dec. 2, 1948	1640	38	3.01				
Jan. 5, 1949	0845	34	19.1				
Feb. 4, 1949	1520	33	31.9				
Mar. 12, 1949	1640	42	50.4				
Mar. 13, 1949	0910	39	48.9				
Apr. 11, 1949	1050	53	63.2				
May 8, 1949	1240	67	15.3				
June 17, 1949	0815	78	27.9				
June 28, 1949	1345	84	269				
Aug. 17, 1949	1025	79	12.3				
Oct. 14, 1949	0950	58	2.46				
Dec. 8, 1949	1355	35	6.46				
Feb. 9, 1950	1220	35	40.1				
Apr. 8, 1950	0835	53	119				
May 5, 1950	0730	69	25.4				
June 1, 1950	1300	72	79.9				
Aug. 3, 1950	1610	78	2.45				
Sept. 9, 1950	1130	70	4.40				
Oct. 5, 1950	1715	58	.69				
Nov. 11, 1950	1530	33	.44				
Dec. 8, 1950	0910	32	1.71				
Jan. 11, 1951	1630	32	3.25				
Feb. 8, 1951	0940	32	23.9				
May 16, 1951	1740	78	15.7				
June 20, 1951	0835	77	9.97				
July 13, 1951	0920	70	342				
Oct. 16, 1951	1525	57	6.58				
Dec. 27, 1951	1620	32	13.2				
May 12, 1952	0800	54	71.8				
Sept. 18, 1952	0900	75	2.71				
Oct. 8, 1952	1645	55	0				
Dec. 5, 1952	1405	45	4.10				
May 8, 1953	0800	58	155				
June 4, 1953	1020	82	7.33				
Nov. 4, 1953	1530	54	.13				
Jan. 8, 1954	1420	45	.82				
Feb. 4, 1954	1245	34	1.11				
Mar. 1, 1954	1520	44	1.46				
Mar. 26, 1954	1300	39	13.6				
Apr. 8, 1954	1455	62	54.1				
May 6, 1954	1515	59	38.7				
Aug. 13, 1954	1135	78	113				

SALT RIVER BASIN

5-5075. Salt River near Monroe City, Mo.

Location.--Lat 39°32'25", long 91°40'20", in NE¼NW¼ sec.22, T.55 N., R.7 W., on left bank on downstream side of old bridge pier, 135 ft upstream from highway bridge at Joanna, 2,500 ft downstream from Indian Creek, 2 miles upstream from Lick Creek, 8 miles southeast of Monroe City, and at mile 63.5.

Drainage area.--2,230 sq mi, approximately.

Discharge records available.--October 1939 to September 1969.

Maximum temperature measured.—92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 16, 1945	1100	77	248	Jan. 11, 1956	1645	34	15.2
Oct. 27, 1945	1115	56	76.0	Feb. 9, 1956	1155	35	19.6
Apr. 27, 1946	1130	62	414	Mar. 1, 1956	1420	38	68.9
June 11, 1946	0820	81	63.7	Mar. 29, 1956	1000	42	14.2
Aug. 14, 1946	0940	71	69.3	Apr. 24, 1956	0845	48	4.26
Oct. 23, 1946	1255	61	237	Oct. 22, 1956	1110	74	.78
Jan. 8, 1947	0900	31	87.4	Nov. 14, 1956	1205	60	1.08
Feb. 9, 1947	1315	33	154	Jan. 11, 1957	1020	40	10.0
July 22, 1947	1300	73	90.7	May 6, 1957	1330	63	217
Sept. 18, 1947	0930	75	4.30	Jan. 6, 1958	1400	33	190
Oct. 14, 1947	1255	74	28.0	Apr. 2, 1958	1410	42	478
May 2, 1948	1415	64	390	July 8, 1958	0940	66	569
June 6, 1948	1030	74	29.0	Aug. 7, 1958	1615	86	531
July 12, 1948	1115	84	99.6	Jan. 8, 1959	1220	32	36.9
Sept. 8, 1948	1445	69	106	Feb. 24, 1959	0930	34	608
Oct. 9, 1948	1520	58	17.3	June 9, 1959	0810	76	154
Nov. 4, 1948	1600	54	902	Nov. 19, 1959	1200	39	41.5
Dec. 3, 1948	1540	39	44.0	Jan. 11, 1960	1210	40	89.1
Jan. 4, 1949	1545	35	209	Feb. 9, 1960	0920	35	1,130
Mar. 13, 1949	1155	40	502	June 13, 1960	1340	75	1,050
Apr. 12, 1949	1120	55	440	July 12, 1960	0615	70	3,710
Aug. 18, 1949	1120	82	164	Dec. 19, 1960	1340	37	24.5
Oct. 13, 1949	1135	62	70.4	Jan. 9, 1961	1435	33	16.1
Dec. 9, 1949	0950	34	51.1	Jan. 30, 1961	1515	33	11.6
Jan. 15, 1950	1430	33	8,320	Feb. 13, 1961	1355	37	226
May 5, 1950	1445	68	311	Apr. 6, 1961	1400	52	532
June 2, 1950	1025	69	569	May 2, 1961	1340	58	517
June 30, 1950	0940	67	141	May 18, 1961	1210	60	1,460
Aug. 4, 1950	1305	76	31.2	June 12, 1961	1510	76	370
Sept. 4, 1950	1545	72	297	July 10, 1961	1730	80	78.5
Nov. 12, 1950	1200	34	9.91	Aug. 7, 1961	1850	84	176
Dec. 8, 1950	1310	33	23.4	Sept. 6, 1961	0945	72	866
Jan. 12, 1951	1415	32	41.0	Sept. 15, 1961	0920	72	37,600
Feb. 7, 1951	1100	32	75.8	Oct. 3, 1961	1025	58	1,340
Mar. 9, 1951	1110	36	336	Nov. 28, 1961	1055	42	796
May 17, 1951	1155	72	247	Jan. 8, 1962	0720	33	2,600
June 20, 1951	1645	76	158	Jan. 31, 1962	1255	33	4,480
Oct. 15, 1951	1545	58	161	Feb. 27, 1962	1220	32	6,740
Sept. 18, 1952	1030	76	30.5	Apr. 1, 1962	1220	48	600
Oct. 8, 1952	1445	59	3.40	May 1, 1962	1510	62	432
Nov. 6, 1952	1725	49	9.87	June 5, 1962	1030	73	548
Dec. 5, 1952	0945	36	40.4	Sept. 4, 1962	1735	73	18.8
Jan. 8, 1953	1445	35	34.6	Oct. 1, 1962	1700	63	15.1
June 3, 1953	1300	84	87.4	Oct. 22, 1962	1410	60	633
Sept. 3, 1953	0810	79	2.59	Jan. 3, 1963	0930	33	22.1
Oct. 13, 1953	1615	54	1.51	Feb. 5, 1963	1720	33	16.0
Nov. 4, 1953	1140	55	1.47	Mar. 11, 1963	1550	41	549
Jan. 11, 1954	1335	36	3.73	Apr. 1, 1963	1535	63	133
Feb. 2, 1954	1725	34	11.0	May 1, 1963	1345	60	483
Mar. 5, 1954	1305	44	14.2	June 3, 1963	1350	81	121
May 7, 1954	0830	59	514	July 9, 1963	1145	80	236
June 8, 1954	1035	72	330	Aug. 5, 1963	1435	89	21.6
July 9, 1954	1510	85	9.33	Sept. 3, 1963	1315	80	31.9
Aug. 3, 1954	1540	92	1.08	Oct. 2, 1963	0815	65	5.06
Nov. 15, 1954	1110	52	13.4	Nov. 5, 1963	0910	52	1.99
Dec. 9, 1954	1015	36	31.2	Dec. 2, 1963	1535	38	28.3
Jan. 11, 1955	1220	33	754	Jan. 14, 1964	1400	38	16.7
Jan. 31, 1955	1610	34	53.7	Feb. 4, 1964	0625	33	25.8
Feb. 25, 1955	1010	37	802	Feb. 17, 1964	1555	39	21.0
Mar. 28, 1955	1500	36	704	Mar. 4, 1964	0930	48	16.2
Apr. 21, 1955	0905	64	294	Mar. 31, 1964	0910	40	650
June 20, 1955	1300	80	108	May 6, 1964	1400	73	282
Sept. 16, 1955	1030	72	15.9	June 4, 1964	1430	70	118
Oct. 13, 1955	1200	65	545	July 6, 1964	1610	87	96.6
Nov. 17, 1955	1100	38	11.3	Aug. 5, 1964	0800	83	10.7
Dec. 15, 1955	1105	33	17.5	Sept. 9, 1964	1035	74	490

SALT RIVER BASIN

Temperature and Discharge of Salt River near Monroe City, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 6, 1964	1145	61	27.1				
Nov. 3, 1964	1255	69	1.85				
Dec. 1, 1964	0930	33	86.5				
Jan. 5, 1965	1100	36	13,900				
Feb. 4, 1965	1140	33	295				
Mar. 3, 1965	1650	34	3,120				
Apr. 7, 1965	1220	59	21,900				
May 4, 1965	0600	69	227				
June 1, 1965	1100	73	98.6				
July 6, 1965	1330	76	566				
Aug. 3, 1965	1340	82	36.0				
Sept. 1, 1965	1205	74	314				
Oct. 4, 1965	1525	62	162				
Nov. 2, 1965	0645	50	50.3				
Dec. 6, 1965	1445	40	42.7				
Mar. 1, 1966	0940	37	115				
May 24, 1966	1230	65	1,680				
July 12, 1966	0855	88	41.3				
Aug. 5, 1966	1210	80	130				
Sept. 7, 1966	1000	68	104				
Oct. 5, 1966	0630	56	12.2				
Nov. 9, 1966	1015	56	8.54				
Dec. 6, 1966	1510	43	38.3				
Jan. 24, 1967	0940	41	49.5				
Feb. 2, 1967	1125	33	153				
Mar. 9, 1967	1115	36	200				
Apr. 11, 1967	1215	58	2,140				
May 2, 1967	1100	60	1,360				
June 6, 1967	1110	72	291				
July 11, 1967	1835	79	34,100				
July 12, 1967	0930	78	11,300				
Sept. 12, 1967	1300	72	28.1				
Oct. 10, 1967	1150	55	519				
Oct. 31, 1967	1630	52	14,100				
Dec. 5, 1967	1430	39	2,230				
Mar. 13, 1968	1035	40	211				
Apr. 2, 1968	1225	55	192				
Apr. 30, 1968	1105	62	237				
June 4, 1968	1025	75	224				
Aug. 22, 1968	1425	85	154				
Oct. 30, 1968	1705	50	95.6				
Feb. 4, 1969	1615	34	1,560				
Apr. 8, 1969	1450	56	4,840				
June 12, 1969	1205	74	441				
July 10, 1969	2050	77	33,900				
Aug. 20, 1969	1235	83	149				
Aug. 26, 1969	1455	83	80.0				

SALT RIVER BASIN

5-5080. Salt River near New London, Mo.

Location.--Lat 39°36'44", long 91°24'30", in NE¼SW¼ sec.36, T.56 N., R.5 W., on left bank 180 ft upstream from upstream bridge on dual U. S. Highway 61, 2 miles north of New London, 8 miles upstream from Spencer Creek, and at mile 35.5.

Drainage area.--2,480 sq mi, approximately.

Discharge records available.--February 1922 to September 1969.

Maximum temperature measured.--92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 13, 1945	1535	80	248	Feb. 6, 1956	1120	35	22.0
Sept. 18, 1945	1515	68	525	Feb. 27, 1956	1215	38	70.3
Oct. 24, 1945	0815	53	111	Apr. 26, 1956	1200	58	11.4
Apr. 27, 1946	0715	61	638	June 18, 1956	1230	76	485
June 7, 1946	0735	71	133	Aug. 17, 1956	1635	70	135
Aug. 17, 1946	1325	79	116	Nov. 12, 1956	1525	58	2.23
Oct. 27, 1946	0730	56	196	Dec. 12, 1956	1440	34	12.3
Dec. 3, 1946	1450	42	115	Jan. 7, 1957	1515	42	11.7
Jan. 8, 1947	1220	32	116	Sept. 23, 1957	0930	54	47.1
Feb. 4, 1947	1305	33	551	Jan. 10, 1958	1010	35	190
Mar. 11, 1947	1330	42	100	June 19, 1958	1245	70	645
May 13, 1947	1250	66	299	Jan. 5, 1959	1335	32	57.7
July 25, 1947	1520	68	105	June 16, 1959	1410	84	97.1
Sept. 9, 1947	1400	85	20.9	Nov. 16, 1959	1250	40	45.6
Oct. 17, 1947	1025	67	33.8	July 14, 1960	0845	74	3,210
Feb. 16, 1948	1500	33	133	Sept. 12, 1960	1230	78	13.1
Apr. 28, 1948	0930	67	169	Jan. 13, 1961	1015	33	23.1
June 2, 1948	1430	82	54.5	Feb. 16, 1961	1130	37	997
Aug. 10, 1948	1130	74	105	Apr. 4, 1961	1540	50	607
Sept. 11, 1948	1530	73	329	May 4, 1961	1925	65	453
Oct. 6, 1948	1255	61	14.4	May 17, 1961	1115	63	712
Dec. 6, 1948	1145	37	46.2	June 14, 1961	1610	78	338
Jan. 7, 1949	1605	42	253	July 18, 1961	1325	74	275
July 6, 1949	1430	82	187	Aug. 11, 1961	1415	82	130
Aug. 10, 1949	1700	73	103	Sept. 16, 1961	1410	64	35,600
Sept. 6, 1949	1720	72	57.9	Oct. 7, 1961	1145	62	341
Oct. 10, 1949	1310	71	118	Nov. 30, 1961	1320	38	673
Dec. 5, 1949	1205	41	72.5	Jan. 4, 1962	1215	34	352
Jan. 11, 1950	0835	36	2,160	Jan. 12, 1962	1230	33	563
Feb. 6, 1950	1315	33	322	Feb. 9, 1962	1400	33	6,460
May 1, 1950	1600	52	356	Mar. 9, 1962	1050	34	934
May 29, 1950	1440	67	706	Apr. 5, 1962	0705	55	615
June 26, 1950	1620	82	348	May 8, 1962	0840	54	263
July 31, 1950	1110	80	70.6	June 12, 1962	1425	75	840
Sept. 5, 1950	1100	72	278	Aug. 17, 1962	0805	60	40.4
Oct. 2, 1950	1140	70	37.2	Sept. 11, 1962	1440	78	32.3
Nov. 8, 1950	1035	48	3.47	Oct. 9, 1962	1130	67	731
Dec. 4, 1950	1410	33	24.4	Oct. 25, 1962	1305	53	330
Jan. 8, 1951	1630	32	116	Nov. 28, 1962	1420	50	53.2
Feb. 5, 1951	1410	32	18.3	Jan. 8, 1963	0505	33	26.8
May 15, 1951	1125	68	536	Feb. 6, 1963	1235	33	34.6
Oct. 15, 1951	1335	59	214	Apr. 4, 1963	1230	62	450
Oct. 6, 1952	1530	62	11.6	May 10, 1963	1140	79	108
Dec. 1, 1952	1355	36	57.9	June 6, 1963	1325	84	95.2
Jan. 5, 1953	1400	35	56.5	July 17, 1963	1335	86	106
Feb. 9, 1953	1120	46	157	Aug. 8, 1963	1750	87	22.8
May 4, 1953	1335	58	715	Sept. 6, 1963	1120	78	33.2
June 1, 1953	1210	76	142	Oct. 8, 1963	0955	70	4.17
July 6, 1953	1705	82	79.0	Oct. 17, 1963	1030	74	3.01
Sept. 1, 1953	1555	86	7.81	Nov. 8, 1963	0945	51	4.42
Oct. 13, 1953	1340	64	3.54	Dec. 5, 1963	1405	41	30.3
Nov. 2, 1953	1135	61	3.48	Jan. 16, 1964	1600	32	12.7
Nov. 30, 1953	1220	46	2.13	Jan. 17, 1964	0830	36	11.5
Jan. 4, 1954	1415	37	4.60	Feb. 6, 1964	1525	33	31.3
Feb. 1, 1954	1530	34	17.0	Feb. 19, 1964	0905	37	31.4
Mar. 16, 1954	1030	34	11.4	Mar 12, 1964	1310	42	390
Mar. 29, 1954	1515	32	637	May 1, 1964	0815	60	1,300
June 11, 1954	0910	86	206	May 4, 1964	1155	71	544
July 6, 1954	1320	92	56.1	June 4, 1964	1420	71	176
Aug. 3, 1954	1140	86	1.29	July 16, 1964	1650	82	341
Nov. 8, 1954	1645	54	39.2	Aug. 11, 1964	1315	88	9.99
Dec. 6, 1954	1525	43	26.5	Aug. 31, 1964	0930	82	184
Jan. 28, 1955	1155	33	99.4	Oct. 6, 1964	1330	61	39.8
Mar. 29, 1955	1010	36	729	Nov. 6, 1964	0750	56	3.59
June 14, 1955	1010	65	294	Dec. 4, 1964	1530	33	111
Aug. 15, 1955	1305	80	91.4	Jan. 9, 1965	1320	33	521
Sept. 12, 1955	1545	69	45.0	Feb. 2, 1965	1430	33	616
Nov. 14, 1955	1405	46	22.6	Mar. 11, 1965	1600	36	2,570
Dec. 12, 1955	1545	34	23.7	May 6, 1965	1330	74	257

SALT RIVER BASIN

Temperature and Discharge of Salt River near New London, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
June 11, 1965	1120	77	667				
Aug. 11, 1965	0855	77	43.3				
Sept. 7, 1965	1630	70	5,110				
Oct. 13, 1965	1220	57	115				
Nov. 4, 1965	1050	55	72.2				
Dec. 10, 1965	0840	42	55.3				
Jan. 7, 1966	0915	33	254				
Mar. 1, 1966	1205	39	141				
May 24, 1966	1555	66	2,520				
June 15, 1966	0935	69	25,900				
July 12, 1966	0710	87	64.2				
Sept. 7, 1966	0745	70	213				
Oct. 5, 1966	0830	58	27.2				
Nov. 8, 1966	1540	55	17.5				
Dec. 7, 1966	0805	43	188				
Jan. 24, 1967	0805	38	57.1				
Mar. 8, 1967	1515	38	288				
June 6, 1967	1440	77	395				
Aug. 4, 1967	1045	80	611				
Aug. 24, 1967	0955	73	210				
Sept. 12, 1967	0955	69	50.3				
Sept. 21, 1967	0900	67	1,630				
Oct. 10, 1967	0950	57	514				
Oct. 16, 1967	1040	57	2,240				
Nov. 9, 1967	1515	41	720				
Feb. 6, 1968	1045	41	1,840				
Mar. 7, 1968	1400	42	136				
Mar. 13, 1968	0840	39	247				
Apr. 9, 1968	0945	54	490				
Apr. 12, 1968	0850	54	209				
Apr. 30, 1968	1420	65	301				
May 7, 1968	1000	62	145				
May 9, 1968	1130	68	133				
June 4, 1968	1525	80	272				
June 18, 1968	1040	73	820				
July 9, 1968	1000	78	140				
July 11, 1968	1600	79	397				
Aug. 6, 1968	1010	75	23,500				
Aug. 22, 1968	1130	86	231				
Sept. 19, 1968	1200	86	415				
Oct. 17, 1968	1500	61	900				
Oct. 30, 1968	1445	48	139				
Nov. 21, 1968	1445	42	780				
Dec. 11, 1968	1450	33	367				
Dec. 12, 1968	1500	42	330				
Jan. 23, 1969	1300	36	8,000				
Feb. 4, 1969	1355	48	2,060				
Feb. 20, 1969	0950	35	540				
Mar. 13, 1969	1415	37	560				
Apr. 8, 1969	1010	56	9,480				
Apr. 10, 1969	1415	59	2,770				
May 8, 1969	1230	66	880				
June 12, 1969	1055	72	659				
June 19, 1969	1430	66	5,200				
Aug. 1, 1969	1140	77	530				
Aug. 20, 1969	0935	81	241				
Aug. 26, 1969	1700	77	96.0				
Sept. 30, 1969	1000	68	180				

SALT RIVER BASIN

5-5088. Spencer Creek near Frankford, Mo.

Location.--Chain gage, lat 39°31', long 91°21', in SE¼NE¼ sec.28, T.55 N., R.4 W., at bridge on U. S. Highway 61, 80 feet below St. Louis and Hannibal Railway bridge, 800 feet above Plum Creek, and 2½ miles northwest of Frankford.

Drainage area.--200 sq mi.

Discharge records available.--March 1930 to September 1936, fragmentary (discontinued), and discharge measurements only from October 1936 to September 1969.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 7, 1961	1355	63	16.0				
May 17, 1962	0920	49	9.64				
June 20, 1962	1230	82	10.2				
Aug. 23, 1962	1140	91	.26				
Nov. 9, 1962	1225	40	.33				
Aug. 15, 1963	0730	72	2.73				
Oct. 8, 1963	0805	70	.12				
Nov. 6, 1963	1035	55	.11				
Oct. 20, 1964	1450	53	.28				
July 7, 1969	1635	77	6,740				
Aug. 26, 1969	0920	74	7.30				

CALUMET CREEK BASIN

5-5097. Calumet Creek near Clarksville, Mo.

Location.--Lat 39°21'05", long 90°57'00", in SW¼NW¼ sec,19, T.53 N., R.1 E., at downstream side of bridge on left bank, 2-3/4 miles southwest of Clarksville, 3½ miles upstream from mouth.

Drainage area.--15.7 sq mi.

Discharge records available.--February 1965 to September 1969.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 11, 1965	1520	40	2.72				
Mar. 5, 1965	1308	39	5.26				
Apr. 16, 1965	1415	62	15.8				
May 7, 1965	1130	75	1.55				
June 10, 1965	1500	85	.23				
July 7, 1965	1130	80	.53				
Aug. 11, 1965	1140	80	.01				
Sept. 9, 1965	1005	75	.21				
Oct. 14, 1965	1215	64	.37				
Nov. 5, 1965	0925	49	.15				
Dec. 10, 1965	1135	46	.15				
Jan. 13, 1966	1215	33	.77				
Mar. 17, 1966	1255	60	1.53				
Apr. 14, 1966	1110	57	4.95				
May 11, 1966	1050	51	3.56				
June 24, 1966	0950	78	.80				
July 27, 1966	0945	80	.09				
Aug. 18, 1966	0920	79	.02				
Sept. 14, 1966	1050	71	.27				
Oct. 10 1966	0700	47	.01				
Nov. 7, 1966	1320	53	.14				
Dec. 9, 1966	1145	42	4.34				
Jan. 12, 1967	0725	33	.26				
Feb. 8, 1967	0910	33	2.78				
Mar. 9, 1967	1155	41	3.48				
Apr. 4, 1967	1555	64	9.81				
May 10, 1967	1435	68	7.21				
June 8, 1967	1245	83	.93				
July 14, 1967	1345	74	.48				
Aug. 17, 1967	1325	80	.07				
Oct. 4, 1967	1205	70	.06				
Dec. 15, 1967	1335	36	8.20				
Mar. 6, 1968	1105	40	1.62				
May 9, 1968	1415	71	.50				
July 19, 1968	1500	85	---				
Sept. 12, 1968	1320	64	.07				
Nov. 15, 1968	0900	50	27.1				
Feb. 4, 1969	1040	33	7.68				
Feb. 20, 1969	1450	38	4.18				
Apr. 7, 1969	1450	67	14.9				
May 12, 1969	1315	61	1.61				
June 6, 1969	1410	83	1.24				
Aug. 7, 1969	1350	77	3.87				

KINGS LAKE BASIN

5-5135. Lost Creek at Elsberry, Mo.

Location.--Lat 39°09'20", long 90°48'20", in NW¼SE¼ sec.29, T.51 N., R.2 E., 3/4 of a mile southwest of Elsberry.

Drainage area.--12.2 sq mi.

Discharge records available.--June 1954 to July 1961 (discontinued).

Maximum temperature measured.--72° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 13, 1954	1240	67	0.99				
Nov. 8, 1954	1255	59	.09				
Dec. 6, 1954	1105	42	.24				
Jan. 12, 1955	1155	33	1.24				
Jan. 31, 1955	1255	33	.27				
Mar. 21, 1955	1500	49	2.88				
Apr. 18, 1955	1250	64	2.50				
May 16, 1955	1040	72	.51				
June 13, 1955	1400	64	.28				
Nov. 14, 1955	1130	39	.07				
Dec. 12, 1955	1200	32	.10				
Feb. 13, 1956	1145	37	.40				
Mar. 2, 1956	1330	38	.88				
Mar. 30, 1956	1120	40	.40				
Apr. 27, 1956	0910	65	1.14				
Nov. 12, 1956	1210	56	.07				
Dec. 13, 1956	0845	34	.71				
Jan. 7, 1957	1205	41	.28				
Jan. 13, 1958	0930	34	.39				
Nov. 3, 1958	1045	51	.45				
Jan. 5, 1959	1015	32	.20				
Apr. 27, 1959	1140	50	4.59				
Nov. 20, 1959	1115	40	2.20				
Feb. 12, 1960	1600	33	3.99				
Apr. 6, 1960	1300	45	9.84				
July 17, 1960	0820	69	2.13				
Jan. 13, 1961	1500	33	.52				
Feb. 16, 1961	1425	37	1.16				
Mar. 10, 1961	1055	48	5.51				
Apr. 8, 1961	1045	50	1.87				
May 5, 1961	1040	55	17.3				
May 16, 1961	1705	61	5.31				
June 15, 1961	0910	70	2.47				

CUIVRE RIVER BASIN

5-5143. North Fork Cuivre River at Silex, Mo.

Location.--NW¼ sec.7, T.50 N., R.1 W., at bridge on County Highway E, at Silex, Lincoln County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--91°F Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 10, 1961	0930	60	16.1				
May 17, 1962	1100	59	18.6				
June 20, 1962	0930	80	6.98				
Aug. 23, 1962	1350	91	.63				
Nov. 9, 1962	1435	40	.64				
Oct. 7, 1963	1100	74	.07				
Nov. 6, 1963	1155	56	.07				
Oct. 20, 1964	1720	55	.02				
Aug. 13, 1969	1740	82	9.85				
Sept. 17, 1969	0955	68	1,130				

CUIVRE RIVER BASIN

5-5145. Cuivre River near Troy, Mo.

Location.--Lat 39°00'59", long 90°59'00", in SE¼ sec.14, T.49 N., R.1 W., on downstream side of center pier of bridge on U. S. Highway 61, 1¼ miles downstream from confluence of North and West Forks, and 2 miles north of Troy.

Drainage area.--903 sq mi.

Discharge records available.--February 1922 to September 1969.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 13, 1945	1135	84	19.6	Apr. 10, 1954	1505	71	5.38
Apr. 27, 1946	1515	62	59.1	May 3, 1954	1005	59	195
June 6, 1946	1455	75	84.8	June 11, 1954	1355	88	132
Aug. 17, 1946	1610	84	234	July 6, 1954	0920	78	42.
Sept. 17, 1946	1530	74	5.84	Aug. 10, 1954	1120	90	.26
Oct. 27, 1946	1045	59	34.7	Nov. 15, 1954	1720	55	1.93
Dec. 3, 1946	1015	39	117	Dec. 6, 1954	0815	40	7.70
Jan. 2, 1947	1330	31	86.0	Jan. 12, 1955	0955	33	98.1
Feb. 4, 1947	0845	33	194	Jan. 31, 1955	1100	33	13.2
Mar. 11, 1947	1010	37	269	Mar. 21, 1955	1240	50	57.9
May 13, 1947	0835	64	165	Mar. 29, 1955	1415	43	174
June 25, 1947	1415	74	199	Apr. 18, 1955	1110	64	234
July 25, 1947	1755	69	13.0	May 16, 1955	0840	67	236
Sept. 8, 1947	1130	85	2.90	Sept. 12, 1955	0925	69	3.10
Oct. 17, 1947	1515	67	2.44	Oct. 18, 1955	0915	58	52.2
Nov. 18, 1947	1045	40	25.7	Nov. 14, 1955	1010	49	18.5
Dec. 16, 1947	1005	33	46.6	Dec. 12, 1955	1035	32	9.73
Jan. 13, 1948	1005	34	132	Jan. 9, 1956	1040	34	8.45
Feb. 16, 1948	1105	32	46.6	Feb. 13, 1956	1020	37	22.6
Apr. 27, 1948	1845	72	76.8	Feb. 27, 1956	0915	40	50.3
June 2, 1948	1040	82	20.3	Mar. 26, 1956	1015	42	14.0
Aug. 9, 1948	1210	73	65.9	Mar. 30, 1956	1230	40	9.63
Sept. 12, 1948	1310	76	39.3	Apr. 26, 1956	1500	49	44.5
Oct. 6, 1948	1020	63	7.40	May 25, 1956	1220	69	156
Dec. 6, 1948	1415	42	16.9	June 18, 1956	0850	76	96.4
Jan. 8, 1949	0905	43	152	Oct. 12, 1956	0955	51	.73
Feb. 1, 1949	1145	34	455	Nov. 12, 1956	1005	54	1.93
Mar. 9, 1949	1100	45	262	Jan. 7, 1957	1015	37	6.59
Apr. 7, 1949	1105	48	360	June 3, 1957	0910	60	179
May 5, 1949	0845	75	189	Sept. 18, 1957	0840	65	3.84
July 6, 1949	1115	78	83.1	Jan. 10, 1958	1340	34	15.3
Aug. 10, 1949	1235	78	63.1	Mar. 5, 1958	1420	35	97.5
Sept. 6, 1949	1200	70	20.9	May 14, 1958	1205	70	140
Oct. 10, 1949	1000	73	116	June 20, 1958	1210	74	115
Dec. 5, 1949	0845	34	42.8	Nov. 3, 1958	1250	55	17.7
Jan. 10, 1950	0910	38	591	Dec. 1, 1958	1110	34	53.0
Feb. 6, 1950	0950	33	153	Feb. 27, 1959	1550	35	226
May 29, 1950	0920	68	148	Apr. 27, 1959	1350	68	228
June 26, 1950	0950	82	85.7	Nov. 16, 1959	0845	41	79.7
July 31, 1950	1800	78	17.5	July 16, 1960	1725	79	124
Sept. 10, 1950	0915	70	23.8	Jan. 13, 1961	1310	33	9.84
Oct. 2, 1950	0835	70	6.41	Feb. 17, 1961	0900	37	151
Nov. 7, 1950	1210	44	5.10	Mar. 10, 1961	1300	48	275
Dec. 4, 1950	1050	33	16.0	Apr. 7, 1961	1515	52	166
Jan. 8, 1951	1315	32	90.0	May 5, 1961	1520	58	451
Feb. 5, 1951	1130	32	11.9	June 15, 1961	1145	74	270
May 1, 1951	0820	65	261	July 19, 1961	1220	78	1,680
May 15, 1951	0805	66	99.3	Aug. 12, 1961	1450	79	383
June 4, 1951	1020	68	41.4	Sept. 9, 1961	0700	76	63.6
June 18, 1951	0920	76	150	Oct. 8, 1961	0800	64	58.6
July 9, 1951	1230	82	225	Dec. 1, 1961	1325	44	134
Aug. 20, 1951	0940	83	51.1	Jan. 4, 1962	0835	34	109
Oct. 15, 1951	1015	62	64.1	Jan. 14, 1962	1040	33	62.7
May 9, 1952	1005	66	186	Jan. 30, 1962	0645	33	2,760
Oct. 3, 1952	0940	70	.81	Mar. 5, 1962	1415	35	289
Nov. 5, 1952	1040	52	1.69	Mar. 21, 1962	1540	43	31,100
Jan. 5, 1953	1100	35	8.96	Apr. 5, 1962	1105	52	306
Feb. 9, 1953	0820	42	11.6	May 10, 1962	1025	54	166
May 4, 1953	0810	62	265	June 13, 1962	1055	71	226
June 1, 1953	0830	78	40.4	Aug. 17, 1962	1200	65	8.35
July 6, 1953	1240	84	17.0	Sept. 11, 1962	0950	69	8.10
Oct. 13, 1953	0920	63	.43	Oct. 9, 1962	1350	75	2.49
Nov. 30, 1953	0940	42	1.26	Oct. 25, 1962	0915	50	14.1
Jan. 4, 1954	1215	37	1.29	Nov. 28, 1962	1020	40	6.05
Feb. 1, 1954	1015	34	2.36	Jan. 7, 1963	0935	33	8.60
Mar. 5, 1954	1700	42	2.52	Feb. 6, 1963	0825	33	6.63
Mar. 29, 1954	1300	53	2.84	Mar. 12, 1963	1525	47	206

Temperature and Discharge of Cuivre River near Troy, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 5, 1963	0825	56	94.6				
May 10, 1963	1705	81	29,9				
June 7, 1963	0720	82	41.2				
July 16. 1963	1020	80	5.96				
Aug. 9, 1963	1135	88	.46				
Sept. 6, 1963	1445	79	3.97				
Oct. 7, 1963	0815	72	.28				
Nov. 6, 1963	1335	59	.73				
Dec. 5, 1963	1020	39	1.20				
Jan. 16, 1964	1220	34	1.59				
Feb. 7, 1964	0745	33	8.78				
Feb. 19, 1964	1155	39	10.8				
Mar. 12, 1964	1520	46	80.0				
May 13, 1964	0905	72	92.8				
June 4, 1964	0950	68	62.5				
July 16, 1964	1155	81	69.3				
Aug. 11, 1964	0740	88	.82				
Sept. 4, 1964	0945	78	.42				
Oct. 5, 1964	1720	61	.09				
Nov. 6, 1964	1105	56	.29				
Nov. 18, 1964	1520	55	202				
Dec. 4, 1964	1020	32	33.0				
Jan. 10, 1965	0730	33	21.0				
Jan. 26, 1965	0855	37	481				
Feb. 2, 1965	1115	33	53.9				
Apr. 9, 1965	0830	55	594				
May 7, 1965	0710	70	105				
June 10, 1965	0945	77	21.4				
July 7, 1965	0735	69	967				
Aug. 10, 1965	1200	76	169				
Sept. 7, 1965	1050	73	240				
Oct. 13, 1965	0950	55	45.3				
Nov. 5, 1965	0700	51	20.3				
Dec. 10, 1965	1410	45	17.8				
Jan. 12, 1966	1030	36	48.4				
Feb. 17, 1966	0750	33	214				
Mar. 17, 1966	1025	54	120				
Apr. 14, 1966	0700	49	601				
May 11, 1966	1355	55	155				
June 15, 1966	1130	71	525				
June 24, 1966	0640	75	69.9				
July 22, 1966	1420	83	9.01				
Aug. 18, 1966	0610	78	19.3				
Sept. 14, 1966	1340	73	5.11				
Oct. 10, 1966	0910	61	2.22				
Nov. 7, 1966	1110	48	5.19				
Dec. 9, 1966	1500	46	289				
Jan. 12, 1967	1055	33	22.4				
Feb. 8, 1967	1210	33	244				
Mar. 10, 1967	1255	44	188				
May 10, 1967	1135	59	607				
June 8, 1967	1000	76	99.4				
July 14, 1967	1040	73	141				
Aug. 17, 1967	1040	77	15.4				
Oct. 4, 1967	0955	68	8.32				
Mar. 6, 1968	1440	46	90.8				
May 9, 1968	1345	70	64.9				
May 9, 1968	1715	68	74.1				
Aug. 2, 1968	1050	72	223				
Sept. 12, 1968	1625	68	58.6				
Oct. 18, 1968	1015	59	157				
Jan. 9, 1969	1250	34	191				
Feb. 20, 1969	1325	38	260				
May 12, 1969	1120	56	146				
June 6, 1969	1050	72	262				
Aug. 7, 1969	1105	75	71.2				

MISSISSIPPI RIVER MAIN STEM

5-5875. Mississippi River at Alton, Ill.

Location.--Lat 38°53'06", long 90°10'51", in sec.14, T.5 N., R.10 W., near left bank in downstream end of intermediate lock wall of lock and dam 26 at Alton, 300 ft downstream from Missouri & Illinois Bridge and Belt Railroad bridge, 7.7 miles upstream from Missouri River, and at mile 202.7 above Ohio River.

Drainage area.--171,500 sq mi, approximately.

Discharge records available.--Discharge: October 1927 to September 1969. Monthly discharge only for some periods, published in WSP 1308. Gage heights: At Grafton since August 1879 and at Alton since January 1904 in reports of Mississippi River Commission. December 1890 to September 1893 and January 1917 to December 1939 in reports of U. S. Weather Bureau.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 28, 1952	1000	53	39,800	Mar. 29, 1965	1540	38	105,000
May 9, 1961	0900	45	227,000	Apr. 5, 1965	0800	45	185,000
June 12, 1961	1235	80	109,000	Apr. 12, 1965	1335	55	303,000
June 19, 1961	1430	81	78,000	Apr. 20, 1965	0800	53	375,000
July 17, 1961	1100	80	35,300	Apr. 26, 1965	0810	55	342,000
July 31, 1961	1140	84	80,700	Apr. 29, 1965	1400	55	348,000
Aug. 11, 1961	1430	81	153,000	May 7, 1965	1320	66	373,000
Aug. 21, 1961	0955	81	40,700	May 10, 1965	1530	64	363,000
Aug. 28, 1961	1230	81	34,500	May 24, 1965	1410	75	186,000
Sept. 5, 1961	1145	82	69,600	June 1, 1965	0800	70	175,000
Sept. 11, 1961	0900	80	30,300	June 7, 1965	1410	74	192,000
Sept. 26, 1961	1230	69	180,000	June 14, 1965	0800	79	166,000
Oct. 2, 1961	1130	64	114,000	June 21, 1965	0800	78	142,000
Oct. 9, 1961	1145	62	101,000	June 28, 1965	1410	80	115,000
Oct. 16, 1961	1315	60	105,000	July 6, 1965	0800	80	101,000
Nov. 13, 1961	1545	48	121,000	July 19, 1965	0905	81	82,900
Dec. 19, 1961	1230	34	75,400	July 26, 1965	1535	84	63,000
Jan. 2, 1962	1230	34	61,700	Aug. 2, 1965	0815	82	29,300
Jan. 22, 1962	1100	34	57,800	Aug. 9, 1965	0715	80	53,400
Jan. 29, 1962	1425	35	73,900	Aug. 16, 1965	1300	86	29,800
Feb. 26, 1962	1000	35	105,000	Aug. 23, 1965	1415	82	41,400
Mar. 6, 1962	1135	34	83,400	Aug. 31, 1965	1415	75	122,000
July 2, 1962	0830	83	76,600	Sept. 8, 1965	0705	75	78,800
Feb. 19, 1963	1100	37	36,200	Sept. 13, 1965	0735	74	89,300
May 6, 1963	0900	64	107,000	Sept. 21, 1965	1405	72	168,000
June 12, 1963	1435	82	79,200	Oct. 5, 1965	0735	62	187,000
July 1, 1963	1000	87	54,300	Oct. 14, 1965	0725	59	140,000
July 8, 1963	1210	85	55,600	Oct. 19, 1965	0730	61	117,000
Aug. 5, 1963	1000	89	46,000	Oct. 25, 1965	1400	57	96,000
Sept. 9, 1963	1135	80	32,800	Nov. 1, 1965	1455	56	93,900
Sept. 16, 1963	1230	75	30,200	Nov. 8, 1965	0725	56	74,000
Sept. 30, 1963	1215	76	19,100	Nov. 15, 1965	0950	52	66,400
Nov. 4, 1963	1230	56	34,000	Nov. 29, 1965	0725	33	72,800
Nov. 12, 1963	1200	56	34,000	Dec. 6, 1965	0740	40	73,800
Nov. 18, 1963	1330	53	27,700	Dec. 13, 1965	1445	41	82,900
Dec. 2, 1963	1100	45	39,400	Dec. 20, 1965	1400	38	102,000
Jan. 20, 1964	1200	42	26,700	Jan. 3, 1966	1520	40	129,000
Jan. 27, 1964	1255	34	38,400	Jan. 17, 1966	1005	33	94,000
Feb. 3, 1964	1440	38	33,800	Feb. 21, 1966	0725	33	163,000
Feb. 10, 1964	1000	35	34,100	Mar. 7, 1966	1520	36	117,000
Feb. 17, 1964	1200	37	25,400	Mar. 21, 1966	0700	52	132,000
Mar. 9, 1964	1100	36	54,300	Mar. 28, 1966	1510	46	176,000
May 25, 1964	0800	76	110,000	Apr. 4, 1966	0745	47	188,000
June 1, 1964	0900	74	90,000	Apr. 11, 1966	0900	46	178,000
June 22, 1964	1215	84	116,000	Apr. 16, 1966	1445	53	154,000
June 29, 1964	1355	84	67,200	Apr. 25, 1966	1200	61	223,000
July 6, 1964	0800	78	54,700	May 9, 1966	1410	50	159,000
July 20, 1964	1210	85	32,100	May 16, 1966	1515	58	202,000
July 27, 1964	0900	87	35,800	May 23, 1966	1350	67	217,000
Aug. 3, 1964	1135	90	25,800	May 31, 1966	1345	71	179,000
Aug. 31, 1964	0900	86	17,400	June 7, 1966	1125	74	115,000
Sept. 17, 1964	1000	75	57,900	June 14, 1966	1145	74	186,000
Sept. 21, 1964	1000	70	62,100	June 21, 1966	1315	77	174,000
Sept. 28, 1964	1000	74	59,500	June 28, 1966	1320	83	71,900
Nov. 2, 1964	0800	59	31,200	July 5, 1966	1055	88	81,800
Nov. 30, 1964	0800	41	36,700	July 12, 1966	1500	90	62,500
Dec. 7, 1964	0800	35	25,800	July 19, 1966	1425	89	82,600
Dec. 14, 1964	1330	37	42,500	Aug. 2, 1966	1505	82	56,400
Dec. 21, 1964	1125	33	41,100	Aug. 8, 1966	1425	84	43,200
Dec. 28, 1964	1500	34	36,000	Aug. 15, 1966	1205	80	44,200
Jan. 25, 1965	1515	38	162,000	Aug. 23, 1966	1335	80	55,700
Feb. 12, 1965	1600	32	116,000	Aug. 29, 1966	1400	81	52,700
Feb. 15, 1965	1530	35	126,000	Sept. 7, 1966	1400	79	42,500
Feb. 23, 1965	1515	36	66,200	Sept. 13, 1966	1335	79	32,200
Mar. 1, 1965	0800	37	57,100	Sept. 20, 1966	1100	69	51,000
Mar. 15, 1965	0700	39	177,000	Sept. 27, 1966	1405	66	41,000
Mar. 22, 1965	1500	37	214,000				

MISSISSIPPI RIVER MAIN STEM

Temperature and Discharge of Mississippi River at Alton, Ill.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 3, 1966	1410	68	27,600
Oct. 11, 1966	1320	66	21,600
Oct. 18, 1966	1225	59	47,900
Oct. 25, 1966	1105	56	38,400
Oct. 31, 1966	1425	55	42,600
Nov. 8, 1966	1125	49	39,400
Nov. 15, 1966	1500	51	36,900
Nov. 22, 1966	1345	50	30,500
Dec. 5, 1966	1415	46	31,200
Dec. 12, 1966	1450	40	71,400
Dec. 20, 1966	1415	40	63,700
Dec. 27, 1966	1530	36	40,200
Jan. 4, 1967	0735	33	35,300
Jan. 16, 1967	0905	33	36,000
Jan. 30, 1967	1410	36	73,800
Feb. 6, 1967	0700	33	74,000
Feb. 13, 1967	1500	39	63,100
Feb. 27, 1967	1745	33	46,200
Mar. 6, 1967	1500	35	57,600
Mar. 13, 1967	1140	43	62,200
Mar. 20, 1967	1350	47	88,500
Mar. 27, 1967	1105	48	128,000
Apr. 3, 1967	1515	56	203,000
Apr. 10, 1967	1420	59	198,000
Apr. 24, 1967	1130	57	255,000
May 1, 1967	1335	59	198,000
May 8, 1967	1225	55	188,000
May 17, 1967	1330	62	124,000
May 22, 1967	1400	66	102,000
June 5, 1967	1225	69	66,400
June 12, 1967	1230	76	47,000
June 19, 1967	1225	82	234,000
July 10, 1967	1300	80	141,000
July 17, 1967	1215	78	80,900
July 24, 1967	1330	81	64,300
July 31, 1967	1320	87	91,600
Aug. 9, 1967	1145	82	73,400
Aug. 14, 1967	1230	80	39,400
Aug. 21, 1967	1320	79	46,400
Aug. 28, 1967	1205	78	25,900
Sept. 7, 1967	1200	75	31,100
Sept. 11, 1967	1320	75	26,400
Sept. 19, 1967	1145	75	52,600
Sept. 26, 1967	1215	72	38,000
Oct. 2, 1967	1140	67	24,500
Oct. 9, 1967	1230	65	39,200
Oct. 27, 1967	1300	53	40,900
Oct. 30, 1967	1230	53	65,900
Nov. 6, 1967	1435	46	141,000
Nov. 20, 1967	1430	46	50,700
Nov. 27, 1967	1515	44	60,600
Dec. 4, 1967	1520	40	72,000
Dec. 11, 1967	1455	41	109,000
Dec. 18, 1967	1500	41	78,500
Jan. 23, 1968	1405	33	88,300
Jan. 29, 1968	1520	38	60,300
Feb. 8, 1968	1535	37	110,000
Feb. 13, 1968	1550	34	85,200
Feb. 20, 1968	1440	34	71,500
Mar. 26, 1968	1405	49	72,600
Apr. 1, 1968	1300	56	40,800
Apr. 11, 1968	1430	59	77,100
Apr. 23, 1968	1310	58	104,000
Apr. 30, 1968	1000	65	111,000
May 9, 1968	1400	66	90,200
June 4, 1968	1440	72	116,000
June 12, 1968	0945	72	101,000
June 17, 1968	1410	77	90,700
June 28, 1968	1510	77	155,000
July 22, 1968	1300	82	119,000
July 30, 1968	1515	78	133,000
Aug. 9, 1968	1405	84	119,000
Aug. 13, 1968	1425	78	104,000
Aug. 20, 1968	1900	85	79,700
Aug. 28, 1968	1415	80	58,300
Sept. 6, 1968	1750	77	40,600
Sept. 10, 1968	1450	72	62,600
Sept. 17, 1968	1350	72	65,100
Sept. 24, 1968	1500	70	93,700
Sept. 30, 1968	1420	72	81,900
Oct. 15, 1968	1305	68	102,000
Oct. 25, 1968	1715	56	106,000
Oct. 30, 1968	1525	54	101,000
Nov. 6, 1968	1440	50	125,000
Nov. 14, 1968	1545	46	93,800
Nov. 19, 1968	0800	54	89,600
Nov. 26, 1968	0900	50	58,500
Dec. 10, 1968	1455	38	51,400
Dec. 17, 1968	1500	36	33,400
Dec. 23, 1968	1700	32	66,900
Jan. 7, 1969	1530	32	56,000
Jan. 14, 1969	1505	33	51,000
Feb. 4, 1969	1515	36	131,000
Feb. 12, 1969	1655	33	154,000
Feb. 18, 1969	1300	36	110,000
Feb. 25, 1969	1600	40	102,000
Mar. 5, 1969	1330	38	118,000
Mar. 13, 1969	1550	38	97,400
Mar. 18, 1969	1315	42	85,100
Mar. 27, 1969	1610	44	208,000
Apr. 3, 1969	0840	43	192,000
Apr. 15, 1969	1520	60	237,000
May 14, 1969	1000	62	233,000
May 19, 1969	1500	66	215,000
June 4, 1969	1410	72	159,000
June 10, 1969	1600	76	129,000
June 17, 1969	1450	70	150,000
June 25, 1969	1430	75	147,000
July 15, 1969	1040	80	349,000
Aug. 12, 1969	1340	82	135,000
Aug. 25, 1969	1450	80	78,600
Sept. 8, 1969	1430	78	59,000
Sept. 22, 1969	1440	72	43,600

TARKIO RIVER BASIN

6-8130. Tarkio River at Fairfax, Mo.

Location.--Lat 40°20'20", long 95°24'20", in SE¼SE¼ sec.22, T.64 N., R.40 W., on downstream side of left bridge pier 0.5 mile west of Fairfax, and 2 miles downstream from unnamed creek.

Drainage area.--508 sq mi.

Discharge records available.--March 1922 to September 1969.

Maximum temperature measured.--93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 31, 1946	1330	79	24.0
Nov. 30, 1946	1400	35	74.0
Dec. 12, 1946	1330	38	66.9
Jan. 16, 1947	0945	31	49.2
Feb. 20, 1947	1230	33	65.1
Mar. 10, 1947	1230	34	34.8
Apr. 2, 1947	1510	56	64.3
Apr. 30, 1947	1445	67	217
May 8, 1947	0910	57	106
May 27, 1947	1445	64	101
July 16, 1947	1450	77	217
July 23, 1947	1525	76	162
Sept. 9, 1947	1410	87	31.2
Oct. 7, 1947	1430	77	25.2
Dec. 6, 1947	0850	34	109
Dec. 26, 1947	0900	32	28.5
Jan. 16, 1948	0910	32	50.4
Jan. 26, 1948	0730	32	26.5
May 12, 1948	1350	62	74.1
May 14, 1948	1600	71	71.4
May 25, 1948	0845	64	37.1
June 18, 1948	0915	68	24.4
July 9, 1948	1520	84	47.2
July 20, 1948	1630	84	18.4
Aug. 7, 1948	1500	77	34.9
Aug. 18, 1948	1600	93	22.0
Sept. 8, 1948	1700	73	184
Sept. 28, 1948	1500	74	7.89
Oct. 21, 1948	1400	60	11.2
Nov. 29, 1948	1410	39	19.8
Mar. 18, 1949	1645	40	166
Apr. 7, 1949	1515	62	116
May 3, 1949	1430	78	67.3
May 17, 1949	1435	65	169
June 2, 1949	1800	62	2,700
Oct. 13, 1949	1200	60	32.7
Nov. 5, 1949	0850	42	40.0
Dec. 5, 1949	1050	33	21.5
Dec. 28, 1949	1530	31	22.8
Jan. 16, 1950	1540	32	25.4
Feb. 11, 1950	1620	31	78.2
Mar. 1, 1950	1220	36	450
Mar. 21, 1950	1620	37	71.4
Aug. 10, 1950	1400	70	84.2
Dec. 19, 1950	1635	32	46.5
Jan. 6, 1951	0910	32	48.5
July 26, 1951	1505	85	232
Oct. 12, 1951	1450	66	173
Nov. 8, 1951	1320	34	119
Mar. 6, 1952	1255	34	112
July 21, 1952	1600	86	165
Aug. 25, 1952	1430	71	107
Oct. 17, 1952	1405	53	55.2
Nov. 14, 1952	1405	50	52.8
Dec. 9, 1952	1445	36	152
Nov. 27, 1953	1340	39	19.7
Dec. 18, 1953	1100	35	11.6
Jan. 26, 1961	1425	33	34.0
Feb. 2, 1961	1545	33	59.1
Feb. 9, 1961	1625	33	67.0
Feb. 16, 1961	1700	40	104
Mar. 3, 1961	0900	43	140
Mar. 31, 1961	0805	45	570
May 1, 1961	1430	56	286
May 18, 1961	1530	57	413
June 9, 1961	0725	71	286
July 14, 1961	0915	73	227
July 20, 1961	1130	80	185
Aug. 15, 1961	0950	73	99.0
Aug. 24, 1961	1340	78	126
Sept. 25, 1961	1610	61	284
Oct. 6, 1961	0745	57	306
Oct. 19, 1961	1610	54	296
Dec. 1, 1961	0815	40	383
Jan. 4, 1962	1300	34	279
Apr. 2, 1962	1435	43	412
May 2, 1962	1255	64	217
May 15, 1962	1555	78	150
June 1, 1962	0755	67	347
July 6, 1962	1000	79	135
July 19, 1962	1140	85	95.9
Aug. 3, 1962	0705	73	108
Aug. 20, 1962	1425	82	56.6
Aug. 30, 1962	1155	83	53.1
Sept. 14, 1962	0705	70	79.7
Sept. 27, 1962	1630	67	62.0
Oct. 11, 1962	1550	77	77.8
Nov. 14, 1962	0655	43	71.2
Dec. 4, 1962	1055	49	75.8
Apr. 11, 1963	1245	60	89.2
Apr. 26, 1963	0720	56	58.4
May 13, 1963	1255	71	393
May 27, 1963	1325	68	181
June 10, 1963	1325	84	84.5
June 20, 1963	1115	86	79.6
July 8, 1963	1600	82	53.6
July 19, 1963	0705	78	78.1
July 29, 1963	1335	89	40.6
Aug. 15, 1963	1605	85	24.6
Sept. 9, 1963	1545	88	30.6
Sept. 14, 1963	1330	82	40.8
Oct. 10, 1963	1320	78	23.1
Oct. 18, 1963	1130	66	505
Oct. 24, 1963	1345	73	33.4
Nov. 18, 1963	1600	53	26.0
Dec. 5, 1963	1610	47	31.3
Mar. 9, 1964	1350	42	49.0
Mar. 20, 1964	0735	34	58.0
Apr. 10, 1964	0755	48	31.9
Apr. 28, 1964	0830	54	549
May 14, 1964	0830	59	194
May 22, 1964	0950	74	97.9
June 5, 1964	0840	60	174
July 1, 1964	0855	78	247
July 15, 1964	0745	74	230
July 22, 1964	0835	83	202
July 28, 1964	1445	90	109
Aug. 6, 1964	1705	81	71.1
Sept. 14, 1964	1400	79	53.2
Oct. 9, 1964	0900	43	40.8
Jan. 19, 1965	1400	34	2.23
Jan. 25, 1965	1345	33	32.7
Mar. 23, 1965	1230	50	206
Apr. 12, 1965	1410	70	99.8
Apr. 29, 1965	1410	73	83.0
May 10, 1965	1650	78	61.5
May 20, 1965	0615	70	211
June 8, 1965	1100	67	19.8
June 24, 1965	0810	73	304
July 7, 1965	1105	76	177
July 29, 1965	1300	73	4.90
Aug. 23, 1965	0830	69	135
Sept. 14, 1965	0810	47	139
Oct. 12, 1965	1340	56	128
Oct. 25, 1965	1515	49	113
Nov. 8, 1965	1540	40	83.1
Dec. 6, 1965	1100	33	8.49
Dec. 17, 1965	1505	39	84.3
Dec. 22, 1965	1550	33	59.2
Jan. 25, 1966			

TARKIO RIVER BASIN

Temperature and Discharge of Tarkio River at Fairfax, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 17, 1966	1020	33	11.3				
Mar. 9, 1966	1425	40	115				
Mar. 30, 1966	1225	58	59.9				
Apr. 18, 1966	1105	50	170				
May 4, 1966	0815	54	41.1				
June 6, 1966	1550	85	59.0				
June 23, 1966	1540	84	32.3				
Aug. 9, 1966	1030	72	21.8				
Aug. 22, 1966	1515	70	108				
Sept. 20, 1966	0840	58	19.4				
Sept. 29, 1966	0935	58	20.9				
Oct. 14, 1966	1310	76	22.3				
Oct. 25, 1966	0925	44	.64				
Oct. 26, 1966	1130	58	12.2				
Nov. 15, 1966	1545	58	18.6				
Dec. 19, 1966	1210	40	25.8				
Feb. 6, 1967	1315	33	34.6				
Feb. 20, 1967	1455	33	12.0				
Mar. 2, 1967	1220	46	31.9				
Mar. 20, 1967	1250	46	29.0				
Apr. 18, 1967	0840	49	30.4				
May 9, 1967	0840	53	23.1				
May 22, 1967	1615	84	13.7				
June 20, 1967	1220	76	292				
July 7, 1967	0750	66	148				
July 24, 1967	1620	92	75.3				
Aug. 22, 1967	0835	68	26.7				
Sept. 5, 1967	1355	79	22.0				
Sept. 19, 1967	1730	80	26.0				
Sept. 27, 1967	1030	50	31.1				
Oct. 4, 1967	1005	74	1.50				
Oct. 16, 1967	1640	63	42.0				
Oct. 20, 1967	1810	45	27.0				
Nov. 13, 1967	1615	47	24.7				
Feb. 26, 1968	1345	34	29.6				
Mar. 12, 1968	1415	42	30.0				
Mar. 25, 1968	1420	69	20.7				
Apr. 9, 1967	0815	44	15.6				
Apr. 10, 1968	1730	72	16.0				
May 8, 1968	1500	69	26.0				
May 21, 1968	1530	80	13.8				
May 27, 1968	1550	73	29.1				
June 19, 1968	1310	84	6.20				
June 24, 1968	1540	88	2.59				
July 10, 1968	1345	86	1.40				
July 15, 1968	1645	90	1.02				
Aug. 7, 1968	1320	90	14.0				
Aug. 27, 1968	1625	87	1.51				
Sept. 18, 1968	0920	57	6.60				
Sept. 20, 1968	0830	55	10.8				
Oct. 16, 1968	1015	61	9.76				
Oct. 30, 1968	1300	58	4.25				
Nov. 26, 1968	1550	40	7.64				
Apr. 1, 1969	1640	53	44.2				
May 13, 1969	1640	73	187				
May 27, 1969	1615	81	185				
June 11, 1969	1000	72	80.4				
June 25, 1969	1515	75	86.5				
July 23, 1969	1720	85	270				
Aug. 27, 1969	1055	72	69.3				
Sept. 10, 1969	0830	66	51.6				

LITTLE TARKIO CREEK BASIN

6-8155.7 Little Tarkio Creek near Mound City, Mo.

Location.--SE¼ sec.7, T.62 N., R.39 W., at bridge on U. S. Highway 59, 1½ miles east of Craig and 7 miles northwest of Mound City, Holt County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 25, 1962	1610	69	65.8				
Sept. 27, 1962	1530	69	17.9				
June 10, 1963	1445	88	15.9				
Aug. 28, 1963	1115	82	8.47				
Sept. 30, 1963	1115	66	5.57				
Oct. 31, 1963	1050	55	7.87				
Aug. 20, 1964	1415	79	17.6				
Oct. 21, 1964	0925	49	12.7				
July 15, 1968	1540	91	.47				
Oct. 2, 1968	1225	71	.88				

MILL CREEK BASIN

6-8160. Mill Creek at Oregon, Mo.

Location.--Lat 39°58'55", long 95°07'35", in NE¼NE¼ sec.35, T.60 N., R.38 W., on left bank 15 feet downstream from bridge on U. S. Highway 275, half a mile upstream from Rock Creek, 1 mile southeast of Oregon, and 7 miles upstream from mouth.

Drainage area.--4.90 sq mi.

Discharge records available.--July 1950 to September 1959 (discontinued). Discharge measurements and daily gage-height record available to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 5, 1950	1500	69	0.37	Apr. 9, 1964	1430	57	0.26
Aug. 14, 1950	1105	70	5.61	Apr. 28, 1964	1100	56	1.19
Sept. 8, 1950	1630	68	.40	May 13, 1964	1505	67	.62
Sept. 29, 1950	0815	69	1.00	May 22, 1964	1140	80	.45
Oct. 7, 1950	1935	63	.75	June 4, 1964	1545	60	4.34
June 27, 1951	0955	74	15.2	July 1, 1964	1100	83	1.11
July 30, 1951	1340	86	2.20	July 14, 1964	1655	83	.59
Aug. 14, 1951	0930	71	35.3	July 28, 1964	1240	85	.37
Aug. 27, 1951	0850	69	5.98	Aug. 7, 1964	0955	80	.23
Nov. 27, 1951	1305	36	2.60	Sept. 14, 1964	1605	70	.51
Mar. 6, 1952	0955	33	1.65	Oct. 8, 1964	1600	52	.21
Mar. 26, 1952	1340	38	3.91	Nov. 2, 1964	1005	58	.46
July 16, 1952	1415	78	1.55	Nov. 17, 1964	1620	48	.56
Sept. 5, 1952	1430	81	1.12	Jan. 8, 1965	0840	36	.92
Oct. 22, 1952	1400	50	.97	Mar. 22, 1965	1635	41	1.95
Nov. 11, 1952	1425	43	1.21	Apr. 12, 1965	1435	50	.91
Nov. 17, 1952	1035	50	39.3	Apr. 29, 1965	1550	71	1.01
Dec. 1, 1952	1415	34	1.36	May 10, 1965	1505	69	.56
Nov. 27, 1953	0930	35	.08	June 7, 1965	1605	77	1.06
Jan. 26, 1961	1225	33	.40	July 29, 1965	0950	69	1.99
Feb. 2, 1961	1435	33	.72	Aug. 18, 1965	1350	79	1.97
Feb. 16, 1961	1520	38	1.63	Sept. 13, 1965	1500	73	1.28
Feb. 23, 1961	1410	42	1.49	Oct. 11, 1965	1500	58	1.86
Mar. 3, 1961	1210	42	.92	Nov. 8, 1965	1030	50	1.56
Mar. 31, 1961	1050	47	1.78	Dec. 23, 1965	0950	48	1.22
May 18, 1961	1355	58	1.69	Jan. 25, 1966	1400	35	1.00
June 22, 1961	1700	77	.65	Mar. 10, 1966	1025	43	1.32
July 14, 1961	1300	73	2.20	Apr. 18, 1966	0950	52	1.00
July 20, 1961	0740	70	1.40	May 3, 1966	1425	65	.52
Aug. 15, 1961	1140	70	1.69	June 6, 1966	1425	75	.40
Aug. 24, 1961	1605	70	.95	June 23, 1966	1340	78	.19
Oct. 5, 1961	1545	60	1.46	July 18, 1966	0935	82	.10
Jan. 4, 1962	1445	35	5.14	July 27, 1966	0905	76	.24
Jan. 16, 1962	1210	33	2.36	Nov. 15, 1966	0930	44	.20
Feb. 1, 1962	1555	34	2.60	Mar. 21, 1967	1035	37	.26
Mar. 8, 1962	1115	34	4.98	Apr. 17, 1967	1030	54	.22
Apr. 2, 1962	1640	49	3.49	May 8, 1967	1005	54	.29
May 2, 1962	1525	70	2.37	May 22, 1967	1420	72	.12
May 15, 1962	1400	76	2.40	June 20, 1967	0950	71	1.18
May 31, 1962	1620	71	2.68	July 7, 1967	1205	70	1.34
July 6, 1962	0750	70	1.80	July 25, 1967	0840	72	.80
July 19, 1962	1000	73	1.32	Aug. 21, 1967	1040	67	.36
Aug. 2, 1962	1610	77	1.26	Sept. 26, 1967	1410	61	1.12
Aug. 20, 1962	1555	78	.90	Oct. 16, 1967	1030	50	.79
Aug. 30, 1962	1245	82	.94	Nov. 14, 1967	1230	42	.76
Sept. 13, 1962	1605	80	1.03	Dec. 19, 1967	1045	35	.75
Sept. 27, 1962	1250	61	.87	Feb. 26, 1968	1520	33	.78
Dec. 4, 1962	0900	47	1.50	Mar. 25, 1968	1250	52	.47
Apr. 11, 1963	1500	58	.98	Apr. 8, 1968	1430	56	.40
Apr. 26, 1963	0950	54	.76	May 27, 1968	1415	63	.40
May 13, 1963	1505	75	.62	June 24, 1968	1240	81	.12
May 27, 1963	1535	67	1.26	Aug. 2, 1968	1020	66	.41
June 10, 1963	1625	80	.40	Sept. 20, 1968	1035	60	.04
June 20, 1963	0950	72	.53	Oct. 15, 1968	1555	73	.04
July 9, 1963	0820	71	.32	Oct. 28, 1968	1630	47	.12
July 29, 1963	1530	80	.15	Nov. 12, 1968	1100	35	.05
Aug. 16, 1963	1305	77	.13	Nov. 27, 1968	0925	37	.19
Sept. 10, 1963	1050	74	.07	Apr. 1, 1969	1520	52	.51
Sept. 19, 1963	1515	76	.13	May 28, 1969	0905	69	.78
Oct. 10, 1963	1535	77	.08	June 25, 1969	0910	72	.69
Oct. 24, 1963	1550	74	.13	July 23, 1969	1330	80	.66
Nov. 18, 1963	1420	51	.21				
Dec. 6, 1963	0920	37	.24				
Mar. 9, 1964	1620	42	.47				
Mar. 20, 1964	1020	35	.72				

NODAWAY RIVER BASIN

6-8175. Nodaway River near Burlington Junction, Mo.

Location.--Lat 40°26'40", long 95°05'20", in NW¼ sec.17, T.65 N., R.37 W., on downstream side of left pier of bridge on U. S. Highway 136 (formerly State Highway 4), a quarter of a mile upstream from Mill Creek, 0.5 mile downstream from Wabash Railroad Co. bridge, 1½ miles west of Burlington Junction.

Drainage area.--1,240 sq mi, approximately.

Discharge records available.--March 1922 to September 1969.

Maximum temperature measured.--93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 31, 1946	1655	74	162	June 22, 1961	1325	76	584
Nov. 25, 1946	1445	36	190	July 14, 1961	0830	71	173
Dec. 12, 1946	1020	39	187	July 21, 1961	0740	74	167
Dec. 27, 1946	1030	38	202	Aug. 11, 1961	1410	86	138
Jan. 16, 1947	1310	31	169	Aug. 24, 1961	1135	75	125
Feb. 20, 1947	1010	32	66.2	Oct. 6, 1961	1045	60	459
Mar. 10, 1947	0930	33	178	Oct. 20, 1961	0820	47	533
Apr. 2, 1947	1135	46	212	Dec. 1, 1961	0945	39	788
Apr. 23, 1947	1305	57	918	Dec. 15, 1961	1125	33	591
Apr. 25, 1947	1500	59	707	Jan. 4, 1962	1055	35	565
May 8, 1947	1245	56	353	May 2, 1962	1040	61	411
May 21, 1947	1505	68	273	May 16, 1962	0700	70	235
July 16, 1947	1500	90	359	July 6, 1961	1205	85	276
July 23, 1947	1220	77	222	July 19, 1962	1410	87	169
July 31, 1947	1430	86	159	Aug. 3, 1962	1000	77	159
Aug. 19, 1947	1430	93	64.7	Aug. 20, 1962	1300	80	82.3
Aug. 23, 1947	1330	89	54.6	Aug. 30, 1962	1545	86	69.5
Oct. 16, 1947	1500	73	31.2	Sept. 14, 1962	0855	74	85.1
Nov. 19, 1947	1530	40	68.4	Sept. 28, 1962	0810	57	53.8
Dec. 6, 1947	1120	37	153	Oct. 12, 1962	0900	67	84.6
Dec. 15, 1947	1340	33	79.0	Nov. 14, 1962	0815	44	88.1
Dec. 26, 1947	1115	33	46.4	Dec. 4, 1962	1255	50	122
Jan. 16, 1948	1230	30	39.2	Apr. 11, 1963	1020	51	169
Jan. 26, 1948	1045	33	9.30	Apr. 25, 1963	1555	67	154
Mar. 9, 1948	1140	32	109	May 13, 1963	0940	68	678
Apr. 29, 1948	1530	68	234	May 27, 1963	1125	65	355
May 12, 1948	1140	58	144	June 10, 1963	1120	78	189
May 25, 1948	1235	70	68.4	June 20, 1963	1405	87	124
June 18, 1948	1240	70	42.3	July 8, 1963	1400	83	109
June 29, 1948	1745	79	180	July 18, 1963	1540	88	499
July 14, 1948	1650	83	83.1	July 29, 1963	1205	86	58.9
July 29, 1948	1830	79	264	Aug. 15, 1963	1405	83	45.0
Aug. 13, 1948	1645	78	349	Sept. 9, 1963	1350	84	94.2
Aug. 24, 1948	1750	90	46.4	Sept. 19, 1963	1145	78	92.1
Sept. 14, 1948	1620	87	36.8	Oct. 10, 1963	1130	71	46.3
Oct. 26, 1948	1700	63	22.1	Oct. 24, 1963	1155	69	67.7
Dec. 3, 1948	1530	44	61.6	Nov. 19, 1963	0850	38	46.6
Dec. 22, 1948	1540	36	67.8	Dec. 5, 1963	1440	44	62.8
Jan. 26, 1949	1420	30	81.1	Feb. 6, 1964	1320	34	102
Feb. 22, 1949	1550	32	782	Mar. 9, 1964	1100	33	83.9
May 4, 1949	1210	74	179	Mar. 19, 1964	1435	41	60.7
May 26, 1949	1735	68	139	Apr. 10, 1964	0935	54	118
Sept. 8, 1949	1340	69	64.4	May 14, 1964	1005	63	514
Oct. 13, 1949	1015	41	114	May 22, 1964	0800	79	234
Dec. 5, 1949	1310	35	33.0	June 5, 1964	1115	64	335
Jan. 6, 1950	1500	30	35.6	June 30, 1964	1415	83	614
Jan. 23, 1950	1355	31	31.6	July 15, 1964	0940	78	828
Feb. 20, 1950	1210	33	130	July 28, 1964	1635	91	282
Mar. 18, 1950	1200	33	113	Aug. 6, 1964	1500	79	254
June 6, 1950	1315	67	109	Sept. 14, 1964	1130	69	344
Sept. 8, 1950	1130	68	63.2	Oct. 9, 1964	1130	49	216
June 6, 1951	1200	32	34.7	Nov. 3, 1964	1120	61	152
Oct. 22, 1951	1310	51	354	Nov. 17, 1964	1315	49	180
Nov. 8, 1951	1645	34	197	Dec. 15, 1964	0840	32	142
Feb. 23, 1952	1320	34	400	Jan. 7, 1965	1325	33	154
June 19, 1952	1405	78	231	Jan. 25, 1965	1200	33	124
Sept. 30, 1952	1310	78	57.4	May 10, 1965	1200	68	495
Oct. 30, 1952	1245	49	50.5	May 20, 1965	1450	82	192
Nov. 14, 1952	1155	49	62.8	June 23, 1965	1410	84	181
Dec. 8, 1952	1430	38	189	July 29, 1965	1325	82	227
Nov. 4, 1953	1100	55	22.1	Aug. 19, 1965	1350	84	99.5
Nov. 25, 1953	1000	35	31.8	Sept. 14, 1965	1035	72	297
Jan. 27, 1961	0920	33	49.9	Oct. 12, 1965	1045	53	309
Feb. 3, 1961	0850	33	64.6	Oct. 25, 1965	1225	51	290
Feb. 17, 1961	0925	34	351	Nov. 8, 1965	1305	49	231
Mar. 2, 1961	1505	45	420	Dec. 6, 1965	1345	38	235
May 1, 1961	1620	57	573	Dec. 22, 1965	1210	35	194
June 9, 1961	1245	76	858				

Temperature and Discharge of Nodaway River near Burlington Junction, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)
Jan. 26, 1966	1130	34	158			
Mar. 9, 1966	1210	38	380			
Mar. 30, 1966	0945	49	330			
Apr. 18, 1966	1315	53	327			
May 4, 1966	0955	60	153			
June 7, 1966	0850	68	263			
June 24, 1966	0845	75	153			
June 29, 1966	0945	77	1,180			
July 14, 1966	1130	87	115			
July 27, 1966	1155	83	134			
Aug. 9, 1966	1410	75	85.8			
Aug. 22, 1966	1255	68	204			
Sept. 15, 1966	1145	67	70.9			
Oct. 14, 1966	1105	70	55.3			
Oct. 26, 1966	1320	61	36.0			
Oct. 28, 1966	0940	52	22.6			
Nov. 16, 1966	0920	46	44.0			
Dec. 19, 1966	1040	37	54.4			
Feb. 6, 1967	1045	33	112			
Mar. 2, 1967	1050	35	56.1			
Mar. 20, 1967	1030	39	78.2			
Mar. 28, 1967	1515	65	356			
Apr. 18, 1967	1050	56	104			
May 9, 1967	1105	61	75.8			
May 23, 1967	0905	61	31.5			
July 6, 1967	1125	74	—			
July 6, 1967	1255	74	324			
July 24, 1967	1345	84	140			
Aug. 22, 1967	1100	72	70.5			
Aug. 23, 1967	0820	71	69.0			
Sept. 6, 1967	0855	64	48.8			
Sept. 20, 1967	0830	70	69.0			
Sept. 26, 1967	1015	65	51.5			
Oct. 17, 1967	1120	50	49.7			
Oct. 19, 1967	1815	56	45.0			
Nov. 8, 1967	0715	39	50.0			
Nov. 13, 1967	1430	46	45.8			
Dec. 18, 1967	1500	36	68.6			
Feb. 26, 1968	1210	34	42.9			
Mar. 12, 1968	1615	42	81.0			
Mar. 25, 1968	1555	63	51.1			
Apr. 9, 1968	1010	51	41.8			
Apr. 10, 1968	1545	68	35.0			
May 8, 1968	1230	55	76.0			
May 21, 1968	1230	61	48.6			
May 28, 1968	0920	59	80.2			
June 19, 1968	1115	73	39.0			
June 25, 1968	0925	73	29.8			
July 10, 1968	1200	77	20.0			
July 16, 1968	1120	73	43.6			
Aug. 7, 1968	1130	82	172			
Sept. 18, 1968	1045	59	36.0			
Sept. 19, 1968	1520	70	44.1			
Oct. 16, 1968	1150	62	27.1			
Oct. 30, 1968	1105	48	29.0			
Nov. 26, 1968	1400	39	49.9			
Dec. 16, 1968	1245	34	18.1			
Feb. 3, 1969	1340	35	80.0			
Mar. 18, 1969	1750	42	3,180			
Apr. 2, 1969	0920	43	206			
May 14, 1969	1020	67	372			
May 27, 1969	1425	78	622			
June 26, 1969	0905	71	211			
Aug. 27, 1969	1325	83	130			
Sept. 9, 1969	1320	74	108			

NODAWAY RIVER BASIN

6-8178. Nodaway River near Oreg Mo.

Location.--NE¼ sec.1, T.59 N., R.37 W., at bridge on U. S. Highway 59, 7 miles east of Oregon, Holt County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 25, 1945	1340	64	113				
Sept. 27, 1962	1110	65	82.4				
Sept. 30, 1963	1245	67	80.0				
Oct. 31, 1963	1245	56	64.0				
Nov. 18, 1963	1300	50	63.7				
Aug. 20, 1964	1535	78	139				
Oct. 21, 1964	1055	52	182				
Sept. 5, 1967	1010	70	75.8				
May 21, 1968	1630	67	97.0				
Oct. 1, 1968	1815	75	22.9				
Nov. 20, 1968	1000	33	84.0				
Dec. 11, 1968	1215	35	49.9				
Jan. 22, 1969	1330	33	---				
Feb. 19, 1969	0910	33	---				
Mar. 12, 1969	1200	35	525				
Apr. 9, 1969	1220	59	472				
May 7, 1969	1200	69	520				
June 18, 1969	1200	68	574				
July 24, 1969	1130	77	1,100				
Aug. 21, 1969	0900	73	471				
Sept. 24, 1969	1015	59	130				

MISSOURI RIVER MAIN STEM

6-8180. Missouri River at St. Joseph, Mo.

Location.--Lat 39°45'10", long 94°51'28", in sec.17, T.57 N., R.35 W., on downstream side of left pier of St. Joseph & Grand Island Railroad bridge in St. Joseph. River mile, 448.2.

Drainage area.--424,300 sq mi, approximately.

Discharge records available.--August 1928 to September 1969. Gage-height records collected in vicinity 1873-99 are contained in reports of Missouri River Commission; since 1900 in reports of U. S. Weather Bureau.

Maximum temperature measured.--89° Fahrenheit.

Remarks.--When two or more temperatures are taken during a day, the average value is published.

Temperature (°F) of water, water year October 1953 to September 1954

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	—	66	—	—	—	—	59	—	—	—	—	—	60	—	—	61	—	—	—	—	65	—	—	—	—	—	57	—	—	—	53
November	—	—	—	—	53	—	—	—	—	—	—	45	—	—	—	—	50	—	—	—	—	—	45	—	—	—	—	—	—	44	—
December	—	—	45	—	—	—	—	—	—	—	—	—	—	36	—	—	—	—	—	—	35	—	—	—	—	—	—	—	—	—	—
January	—	—	—	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—
February	35	—	—	—	—	—	—	35	—	—	—	—	—	—	40	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	—
March	38	—	—	—	—	—	—	36	—	—	—	—	—	—	35	—	—	—	—	—	—	45	41	—	—	—	—	—	40	—	—
April	—	—	—	—	45	—	—	—	—	—	—	54	—	—	60	—	—	—	—	—	58	—	—	—	—	65	—	—	—	62	—
May	—	—	—	—	50	—	50	—	—	58	—	—	—	60	—	—	—	66	—	—	—	—	—	66	—	—	67	—	—	—	—
June	—	—	64	—	—	—	—	—	69	—	73	—	—	—	—	72	—	—	80	—	82	—	—	—	—	—	—	83	—	—	—
July	83	—	—	—	—	—	85	—	—	—	—	82	—	—	—	—	82	—	—	—	85	—	—	—	—	—	—	80	—	—	—
August	—	78	—	—	81	—	—	—	—	75	—	—	—	—	—	79	—	—	—	—	78	—	—	—	78	—	—	—	—	—	81
September	—	82	—	—	—	—	—	—	75	—	—	—	—	70	—	—	—	—	—	70	—	—	—	68	—	—	—	68	—	—	—

Temperature (°F) of water, water year October 1954 to September 1955

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	65	—	—	—	—	60	—	—	—	—	—	65	—	—	—	57	—	—	—	—	55	—	—	—	—	60	—	—	—	50	—
November	—	—	40	—	42	—	—	45	—	—	—	—	54	—	—	52	—	—	—	—	—	45	—	—	—	—	—	—	—	42	—
December	39	35	—	40	—	—	—	—	—	38	—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	33	—	—	—
January	—	—	—	—	—	—	—	—	—	—	—	—	35	—	—	—	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35	35	—	—	—	—	—	—	—
March	—	—	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	42	—	—	—	—	—	39	—	—	—	35	37	—	45
April	—	—	—	—	52	—	—	—	—	—	—	59	—	—	—	—	—	—	65	—	—	—	65	—	63	—	—	—	60	—	—
May	—	—	—	—	70	—	—	—	—	63	—	—	61	—	—	—	—	—	70	—	—	—	—	71	—	70	—	—	—	—	—
June	—	70	—	—	—	—	71	—	69	—	—	—	—	65	—	—	71	—	—	—	75	—	—	—	—	—	74	—	—	77	—
July	—	—	—	—	—	—	84	—	—	—	—	82	—	—	—	—	—	—	80	—	—	85	—	—	82	—	—	—	86	—	—
August	—	—	85	—	—	84	—	82	—	—	—	81	—	—	—	80	—	—	—	—	—	—	83	—	—	—	81	—	—	79	—
September	75	—	—	—	—	—	75	—	—	—	—	70	—	—	—	—	—	—	75	—	—	—	70	—	—	—	66	—	—	—	—

Temperature (°F) of water, water year October 1955 to September 1956

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	65	—	—	—	66	—	—	—	—	—	64	—	—	—	60	—	—	—	—	—	—	58	—	—	56	—	—	—	—	—	—
November	51	—	—	—	48	—	—	—	43	—	—	—	—	43	—	—	—	—	—	—	—	—	38	—	—	—	—	—	—	30	—
December	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	31	—	—	—	—	—	—	—	31	—	—
January	—	—	—	—	—	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	—	—	—	—
February	—	—	—	—	—	36	—	—	—	—	—	—	36	—	—	—	—	—	—	32	—	—	—	—	—	—	—	—	37	—	—
March	—	—	—	—	—	—	35	—	—	—	—	—	—	36	—	—	—	—	—	—	40	—	—	43	—	—	—	48	—	—	—
April	—	—	—	48	—	—	45	—	—	—	—	—	50	—	—	—	—	—	49	—	—	52	—	—	—	54	—	—	—	—	—
May	49	—	—	—	—	—	—	56	—	—	—	66	—	—	—	—	—	—	67	—	—	—	—	64	—	—	—	—	72	—	—
June	—	—	—	—	72	—	—	—	75	—	—	—	—	—	—	77	—	—	—	—	—	—	81	—	—	81	—	—	80	—	—
July	—	—	—	—	—	79	—	—	—	79	—	—	—	78	—	—	—	80	—	—	—	—	80	—	—	—	—	—	—	82	—
August	—	—	81	—	—	—	84	—	—	—	—	—	—	82	—	—	—	82	—	—	—	—	—	—	76	—	—	—	—	79	—
September	—	—	—	—	74	—	—	—	67	—	—	—	—	71	—	—	—	70	—	—	—	69	—	—	67	—	—	—	—	—	—

6-8180. Missouri River at St. Joseph, Mo.

Temperature (°F) of water, water year October 1956 to September 1957

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	--	65	--	--	--	--	--	--	62	--	--	59	--	--	--	64	--	--	--	65	--	--	--	--	--	--	58	--	--	--	--
November	--	--	--	--	52	--	--	--	--	--	--	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--	--	--	32	--	--
December	--	--	--	--	--	37	--	--	--	--	--	--	--	31	31	--	--	--	--	--	--	--	--	--	--	--	--	39	--	--	--
January	--	--	--	--	--	--	31	--	--	--	--	--	--	--	--	30	--	--	30	--	--	--	--	31	--	30	35	--	31	--	--
February	--	--	--	31	--	--	36	--	--	--	--	--	--	--	38	--	--	--	--	--	--	--	--	--	37	--	--	--	--	--	--
March	40	--	--	--	--	--	35	--	--	--	--	--	48	--	--	--	--	--	41	--	--	--	--	--	--	--	--	--	45	--	--
April	--	48	--	--	--	--	--	--	--	--	46	--	--	--	--	--	--	--	59	--	--	--	62	--	--	64	--	--	--	--	--
May	--	--	64	--	--	--	65	--	--	--	--	--	--	64	--	--	--	--	--	--	--	--	--	--	66	--	--	--	68	--	--
June	--	--	--	72	--	--	75	--	--	--	--	73	--	--	--	--	--	72	--	74	--	--	--	--	75	--	--	74	--	--	--
July	--	78	--	--	--	--	--	84	--	--	--	--	85	--	--	--	--	--	--	87	--	--	--	--	--	84	--	--	--	86	--
August	--	88	--	--	--	--	78	--	--	--	--	--	83	--	--	82	--	--	--	--	--	--	78	--	--	--	--	75	--	--	--
September	--	--	--	78	--	--	--	--	--	69	69	--	--	--	--	--	--	--	69	--	--	--	--	--	66	--	66	--	--	--	--

Temperature (°F) of water, water year October 1957 to September 1958

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	66	--	--	--	--	--	--	62	--	--	--	--	--	58	--	--	--	60	--	--	--	--	--	--	53	--	--	--	48	--	--
November	--	--	--	--	46	--	--	--	--	--	--	--	45	--	--	--	--	--	43	--	--	--	--	--	--	40	--	--	--	--	--
December	--	--	--	--	--	41	--	--	--	--	--	--	--	--	--	39	--	--	--	--	--	--	--	40	--	--	--	--	--	--	--
January	34	31	--	--	--	--	--	--	--	--	--	--	36	--	34	--	--	--	--	36	--	--	--	--	--	--	--	--	--	32	--
February	--	--	--	--	--	--	--	31	--	31	--	31	--	32	--	--	--	--	37	--	--	--	--	--	--	--	--	--	--	--	--
March	--	--	--	37	--	--	--	--	--	--	--	--	41	--	--	--	--	--	--	42	--	--	--	--	--	--	--	50	--	--	--
April	--	53	--	--	--	--	--	50	--	--	--	53	--	--	--	--	60	--	--	--	--	--	--	--	--	56	--	--	--	--	--
May	56	--	--	--	--	62	--	--	--	--	--	69	--	--	--	--	--	--	72	--	--	--	--	67	--	--	70	--	--	--	--
June	--	--	73	--	--	--	72	--	77	--	--	--	74	--	--	--	74	--	--	--	--	--	--	--	--	--	71	--	--	--	--
July	--	77	--	--	77	--	75	--	--	--	74	--	--	--	75	--	--	--	--	--	--	73	--	--	--	76	--	--	80	--	--
August	77	--	--	--	83	--	--	84	--	--	86	--	--	--	84	--	--	--	85	--	--	82	--	--	75	--	--	75	--	--	--
September	--	76	--	--	75	--	--	--	--	--	76	--	--	--	72	--	--	70	--	--	--	--	--	72	--	--	--	--	67	--	--

Temperature (°F) of water, water year October 1958 to September 1959

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	--	62	--	--	--	--	63	--	--	--	--	--	61	--	--	64	--	--	--	64	--	--	62	--	--	--	--	--	--	54	--
November	--	--	53	--	--	--	52	--	--	--	--	--	--	54	--	--	56	--	--	--	50	--	--	--	--	--	--	40	--	--	--
December	39	--	38	--	--	--	--	--	--	35	--	--	--	--	36	--	--	37	--	--	--	--	38	--	--	--	--	--	38	--	35
January	--	34	--	--	--	--	--	35	--	--	--	36	--	--	--	35	--	--	--	--	--	--	35	--	--	--	35	--	--	35	--
February	--	--	--	--	35	--	--	--	35	--	--	--	38	--	--	--	36	--	--	--	--	--	--	36	--	--	--	--	--	--	--
March	--	41	--	--	--	--	--	--	--	41	--	--	--	--	--	43	--	--	--	--	--	--	45	--	--	--	45	--	--	--	--
April	--	45	--	--	--	45	--	--	45	--	--	--	--	45	--	--	--	--	--	--	45	--	45	--	--	--	--	45	--	--	--
May	45	--	--	48	--	--	--	58	--	--	58	--	--	--	58	--	--	--	58	--	--	59	--	--	--	59	--	--	--	--	--
June	60	--	--	--	60	--	--	--	--	--	64	--	--	--	64	--	--	--	78	--	--	--	--	--	78	--	--	--	80	--	--
July	--	72	--	--	--	--	77	--	--	--	--	--	80	--	--	--	78	--	--	--	--	--	81	--	--	--	--	81	--	--	--
August	--	--	--	82	--	--	--	--	--	82	--	--	--	81	--	--	--	79	--	--	--	--	--	84	--	--	--	83	--	--	--
September	82	--	--	--	--	--	--	80	--	--	78	--	--	--	75	--	--	--	--	--	69	--	--	69	--	--	--	--	70	--	--

Temperature (°F) of water, water year October 1959 to September 1960

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	--	--	--	--	--	65	62	--	--	--	--	--	57	--	58	--	--	--	--	58	--	58	--	--	--	--	55	--	53	--	--
November	--	--	55	--	51	--	--	--	--	--	--	45	--	--	--	--	44	--	44	44	--	--	--	--	--	--	42	--	--	--	--
December	--	--	42	--	--	--	--	--	--	--	42	--	--	--	--	--	--	--	--	--	44	--	--	--	--	--	--	--	--	--	--
January	--	--	--	--	42	--	--	--	--	--	38	--	--	--	38	--	--	--	--	--	37	--	--	--	--	--	32	--	--	--	--
February	--	36	--	--	--	--	--	--	--	--	--	--	--	--	--	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March	--	32	--	--	--	--	--	--	--	31	38	--	--	34	--	--	--	--	--	--	--	41	--	--	--	--	--	--	--	42	--
April	41	--	--	43	44	45	46	47	--	--	51	--	--	53	--	--	--	--	58	--	--	--	--	--	65	--	--	--	64	--	--
May	--	--	58	--	--	--	--	--	60	--	--	--	64	--	--	--	70	--	--	--	--	--	68	--	--	--	72	--	--	--	--
June	--	--	--	--	--	76	--	--	--	75	--	--	--	73	--	--	--	--	--	--	--	76	--	76	--	--	77	--	--	--	--
July	--	--	--	--	--	79	--	--	--	--	80	--	--	--	82	--	--	--	82	--	--	--	--	--	85	--	--	--	85	--	--
August	--	84	--	--	--	--	--	84	--	--	--	82	--	--	--	84	--	--	--	--	--	82	--	--	--	84	--	--	--	81	--
September	--	--	--	--	--	85	--	--	--	--	--	80	--	--	75	--	--	--	76	--	--	--	72	--	--	--	70	--	--	--	--

MISSOURI RIVER MAIN STEM--Continued

6-8180. Missouri River at St. Joseph, Mo.

Temperature (°F) of water, water year October 1960 to September 1961

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October........	--	--	69	--	--	--	67	--	--	--	67	--	--	--	--	--	67	--	--	--	--	--	--	--	56	--	--	--	--	--	54
November.......	--	--	53	--	--	--	--	50	--	58	--	--	--	--	48	--	47	--	--	--	--	46	--	--	46	--	--	45	--	--	--
December......	--	35	--	--	--	43	--	--	--	--	--	--	--	--	39	--	--	--	--	32	--	--	--	--	--	--	--	34	--	--	37
January........	--	--	--	--	37	--	--	--	--	36	--	--	--	--	--	--	--	39	--	--	--	--	--	--	--	--	--	--	--	--	38
February.......	--	33	--	--	--	--	32	--	--	--	38	--	--	--	--	40	--	--	--	--	38	--	--	35	--	--	--	35	--	--	--
March..........	--	41	42	--	--	--	40	--	34	--	--	--	--	--	42	--	--	--	--	--	40	--	--	--	--	--	--	--	47	--	--
April..........	--	--	--	--	50	--	--	--	--	--	--	45	--	--	--	--	--	48	--	--	56	--	--	--	--	--	59	--	--	--	--
May............	55	--	--	--	54	--	--	--	60	--	61	--	--	--	--	--	--	60	--	--	--	--	63	--	--	66	--	--	--	--	--
June...........	--	72	--	--	--	74	--	77	--	--	--	--	81	--	--	--	--	--	--	77	--	--	75	--	--	--	74	--	--	--	--
July...........	--	--	84	--	--	81	--	--	--	--	80	--	80	--	--	--	--	--	83	--	--	--	--	--	79	--	81	--	82	--	--
August.........	86	--	--	--	--	--	--	85	--	--	--	--	--	83	--	83	--	--	--	--	--	75	--	--	75	--	--	--	82	--	84
September.....	--	--	--	--	74	--	--	74	--	--	--	74	--	--	65	--	--	65	--	--	--	69	--	--	62	--	--	60	--	--	--

Temperature (°F) of water, water year October 1961 to September 1962

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October........	--	--	59	--	60	--	--	--	--	65	--	--	61	--	--	--	63	--	62	--	--	--	--	--	--	--	55	--	--	--	57
November.......	--	--	--	--	--	48	--	--	--	--	--	--	--	45	--	48	44	--	--	38	--	--	--	44	--	--	--	--	--	42	--
December......	--	--	--	--	48	--	--	40	--	--	--	--	--	--	--	--	--	33	--	--	--	32	--	--	--	--	--	33	--	--	--
January........	--	--	34	--	--	--	--	--	--	--	--	38	--	--	--	--	--	--	--	--	--	--	--	38	--	--	--	--	37	--	--
February.......	37	--	--	--	--	--	--	41	38	--	--	--	39	--	--	48	--	--	33	--	--	--	33	--	--	--	--	--	--	--	--
March..........	--	--	--	--	--	--	--	--	38	--	--	40	--	--	38	38	--	--	44	--	--	--	42	--	--	42	44	--	46	42	--
April..........	40	--	43	--	46	--	--	--	50	--	--	--	50	--	--	--	57	--	54	--	--	--	--	62	--	63	--	--	--	--	--
May............	65	--	60	--	--	--	--	70	--	68	--	--	--	--	72	--	74	--	--	76	--	75	--	74	--	--	--	--	78	--	68
June...........	--	--	--	--	68	--	70	--	--	--	--	75	--	76	--	--	78	--	80	--	78	--	--	--	--	82	--	81	--	--	--
July...........	--	--	81	--	--	--	--	--	--	85	--	--	80	--	--	--	82	--	80	--	--	--	--	81	--	82	--	--	--	--	78
August.........	--	78	--	--	--	--	85	--	--	--	--	--	--	82	--	80	--	--	--	--	80	--	80	--	--	--	--	78	--	79	--
September.....	--	--	--	--	73	--	--	--	--	--	70	--	72	--	--	--	--	74	--	70	--	--	--	--	68	--	68	--	--	--	--

Temperature (°F) of water, water year October 1962 to September 1963

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October........	--	62	--	62	--	--	--	--	66	--	68	--	--	--	--	69	--	66	--	--	--	--	58	--	57	--	--	--	--	55	--
November.......	51	--	--	--	--	48	--	49	--	--	--	--	49	--	--	--	--	--	--	--	43	--	--	--	--	--	--	54	48	--	--
December......	--	--	54	--	--	--	--	--	--	--	32	32	37	--	--	--	38	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January........	--	33	33	--	--	--	38	--	--	--	34	--	--	--	--	--	33	--	--	--	--	32	--	--	--	--	--	--	35	--	--
February.......	--	--	--	--	37	--	--	--	--	--	--	33	--	--	--	--	--	--	38	--	--	--	--	--	--	32	--	--	--	--	--
March..........	36	--	--	--	37	--	--	40	--	--	--	41	--	--	--	--	--	--	--	45	--	--	--	--	--	51	--	56	--	--	--
April..........	--	60	--	--	--	--	--	--	55	--	--	60	--	--	--	59	--	58	55	--	--	--	53	--	--	--	--	--	--	58	--
May............	--	58	--	--	--	--	--	68	--	--	--	--	--	70	--	64	--	--	--	--	64	--	--	63	--	--	--	64	--	--	--
June...........	--	--	--	75	--	--	--	--	--	--	81	--	82	--	--	--	--	78	--	--	--	--	--	76	--	--	78	--	--	--	--
July...........	--	87	--	--	--	--	--	--	81	--	81	--	--	--	--	78	--	--	--	--	--	--	88	--	--	--	--	--	--	82	--
August.........	82	--	--	--	--	83	--	--	--	--	--	--	83	--	--	--	--	--	--	75	--	--	--	--	--	--	80	--	--	80	--
September.....	--	--	78	--	--	76	--	--	--	--	79	--	--	--	--	--	70	--	--	75	--	--	--	71	--	--	--	--	--	--	--

Temperature (°F) of water, water year October 1963 to September 1964

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October........	68	--	--	--	--	--	--	70	--	--	69	--	--	--	69	--	--	--	--	--	--	--	--	--	67	--	--	--	62	--	--
November.......	56	--	--	--	--	--	62	--	--	--	--	--	46	--	--	--	--	50	--	--	50	--	--	--	--	--	42	--	--	--	--
December......	--	39	--	--	--	--	--	--	36	--	--	--	--	--	--	--	32	--	--	--	--	--	--	37	--	--	32	--	--	--	37
January........	--	--	--	--	--	--	37	--	--	--	--	--	--	--	37	--	--	--	--	--	--	38	--	--	--	--	--	32	--	42	--
February.......	--	--	--	--	--	--	39	--	--	--	35	--	--	--	--	--	--	--	--	35	--	--	--	--	33	--	--	--	--	--	--
March..........	--	44	45	--	--	--	--	--	--	35	--	--	--	--	--	--	--	45	--	--	--	--	--	40	--	--	--	--	--	--	42
April..........	--	48	--	--	--	--	--	--	44	--	--	--	--	53	--	--	--	--	--	--	60	--	59	--	--	--	--	--	--	60	--
May............	--	--	--	64	--	--	69	--	--	--	--	--	63	--	66	--	--	--	--	76	--	--	--	--	--	74	--	70	--	--	--
June...........	--	--	--	--	--	--	--	--	75	--	--	--	--	--	--	78	--	74	74	--	--	79	76	--	79	--	--	--	--	82	--
July...........	--	--	--	--	--	82	--	--	--	--	--	--	--	80	--	--	--	--	--	--	--	--	--	--	--	--	--	85	--	85	--
August.........	--	--	85	84	--	--	--	--	--	81	--	--	--	--	--	--	--	--	--	--	77	--	--	--	--	73	--	--	--	--	--
September.....	74	--	--	80	--	--	--	--	77	--	--	--	--	--	71	--	70	--	--	--	--	--	--	67	--	--	--	--	63	--	--

MISSOURI RIVER MAIN STEM—Continued

6-8180. Missouri River at St. Joseph, Mo.

Temperature (°F) of water, water year October 1964 to September 1965

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	—	64	—	—	—	—	—	56	—	—	—	—	53	—	—	60	—	—	—	—	—	54	—	—	—	—	57	—	—	57	—
November	—	—	—	—	57	—	—	—	—	58	—	—	57	—	—	—	—	48	—	—	—	—	—	40	—	—	—	—	—	—	—
December	33	—	—	—	—	—	38	—	—	—	—	—	—	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38
January	—	—	—	—	36	—	—	—	—	—	—	—	33	—	33	—	—	—	—	34	36	—	—	—	—	36	—	—	—	—	—
February	—	37	—	—	38	—	—	39	—	—	—	—	—	—	37	33	—	40	—	—	—	—	—	—	—	—	—	—	—	—	—
March	35	33	—	—	—	44	—	—	34	—	—	—	—	—	—	40	—	33	—	—	—	38	—	—	33	—	—	—	40	—	—
April	44	—	—	—	—	44	—	—	49	—	—	—	52	—	—	50	—	—	—	—	58	—	—	—	—	—	—	—	—	58	—
May	—	—	—	—	—	—	71	—	—	—	68	—	—	66	—	—	—	65	—	—	—	—	—	—	—	—	70	—	—	—	—
June	—	—	71	—	—	—	—	70	—	—	72	—	—	—	—	—	75	—	—	—	—	—	—	77	—	—	—	—	74	73	—
July	76	78	—	—	—	80	—	—	—	—	—	—	81	—	83	—	—	—	—	76	76	—	82	—	—	—	84	—	—	—	—
August	—	—	80	—	81	—	—	—	—	—	—	77	—	—	—	—	—	81	—	—	—	—	—	74	—	—	—	—	—	—	77
September	—	—	72	—	—	—	—	71	—	—	—	—	71	—	—	—	66	—	—	—	—	—	—	—	—	—	—	60	—	—	—

Temperature (°F) of water, water year October 1965 to September 1966

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	62	—	—	—	58	—	—	—	—	—	60	—	—	—	—	—	—	—	64	—	—	62	—	—	—	56	—	—	—	—	—
November	—	56	—	—	—	—	—	—	—	54	—	—	—	—	—	49	—	—	—	—	—	—	48	—	—	—	—	—	—	—	—
December	—	—	—	—	—	—	—	38	—	—	—	—	—	41	—	—	—	—	—	—	36	—	—	—	—	—	37	—	—	—	—
January	—	—	—	40	—	—	—	—	—	—	—	38	—	38	—	—	—	—	—	—	—	—	—	34	38	—	—	—	—	—	—
February	—	36	—	—	—	—	—	—	—	—	38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March	40	—	—	—	—	—	—	—	—	40	—	—	—	—	48	—	—	—	—	—	—	—	46	—	—	—	—	43	—	—	—
April	—	—	—	48	—	—	—	—	—	—	—	46	—	—	50	—	—	—	55	—	—	—	—	—	54	—	—	—	58	—	—
May	—	—	55	—	—	—	—	61	64	—	—	—	52	—	—	—	63	—	—	—	—	—	—	65	—	69	—	—	—	—	—
June	72	—	—	—	—	73	—	—	—	68	—	—	—	—	74	—	—	—	—	—	72	—	—	—	—	—	76	—	—	—	—
July	83	—	—	—	—	82	—	—	—	—	82	—	—	—	86	—	—	—	80	—	—	—	—	—	—	80	—	—	—	—	—
August	—	84	—	—	—	—	—	83	—	—	—	79	—	—	80	—	77	—	—	—	—	66	—	—	—	74	—	—	77	—	—
September	—	81	—	—	—	—	78	—	—	—	—	—	75	—	—	64	—	—	—	—	69	—	—	—	—	65	—	—	—	61	—

Temperature (°F) of water, water year October 1966 to September 1967

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	—	—	—	63	—	—	61	—	—	—	—	63	—	—	—	—	55	—	—	—	55	—	—	—	—	—	56	—	—	—	—
November	50	—	—	—	—	—	—	50	—	—	—	—	—	42	—	—	47	—	—	—	—	46	—	—	50	—	—	45	—	—	—
December	—	—	—	—	38	—	—	40	—	—	—	—	38	—	—	—	—	—	—	36	—	—	—	—	—	—	—	—	—	—	—
January	—	—	—	—	—	37	—	—	—	—	—	—	36	—	—	—	—	—	—	—	—	39	—	—	—	—	—	—	—	—	—
February	—	38	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	—	—	—	—	—	—	35	—	—	—	—
March	—	—	—	—	—	33	—	—	—	—	—	—	—	—	—	—	37	—	—	—	39	—	—	50	—	—	—	52	—	—	—
April	—	—	—	—	45	—	—	—	—	—	56	—	—	—	—	—	57	—	—	—	—	—	—	—	51	—	—	52	—	—	—
May	—	54	—	—	—	—	—	55	—	—	—	—	—	—	54	—	—	—	65	—	—	—	62	—	—	—	—	—	66	—	—
June	—	56	—	—	—	—	—	70	—	—	—	72	71	—	72	—	73	74	—	72	—	—	76	—	—	—	—	—	—	76	—
July	—	—	—	—	—	74	—	—	—	74	—	—	—	—	—	—	—	73	—	—	—	—	—	—	80	—	—	—	—	—	—
August	80	—	—	—	—	—	80	—	—	—	—	—	—	73	—	—	—	—	—	—	76	—	—	—	—	—	—	73	—	—	—
September	—	—	—	—	72	72	—	—	—	—	—	—	—	—	—	—	—	68	—	—	—	—	—	—	—	69	—	—	—	—	—

Temperature (°F) of water, water year October 1967 to September 1968

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	—	68	—	—	—	—	—	—	57	—	—	—	—	—	—	—	56	—	—	—	—	—	—	54	—	—	—	—	—	—	48
November	—	—	—	—	—	—	46	—	—	—	—	—	—	46	—	—	—	—	—	—	44	—	—	—	—	—	38	—	—	—	—
December	—	—	—	42	—	—	—	—	—	—	—	—	—	—	37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
January	—	—	—	—	38	—	—	—	—	—	—	—	—	—	—	35	—	—	—	—	—	—	38	—	—	—	—	—	37	—	40
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	—	—	—	—	—
March	—	—	—	38	—	—	—	—	—	—	—	38	—	—	—	—	—	—	50	—	—	44	—	—	—	48	—	—	—	—	—
April	—	48	—	—	46	—	—	51	—	—	—	—	—	—	—	—	—	55	—	—	—	—	—	—	52	—	—	—	—	56	—
May	—	63	—	—	—	64	—	—	—	—	—	—	64	—	—	—	—	—	—	56	—	—	—	57	—	—	58	—	—	—	—
June	—	—	—	71	—	—	74	—	—	—	78	—	—	—	—	—	75	—	—	—	78	—	—	—	79	—	—	72	—	—	—
July	—	75	—	—	77	—	—	—	78	—	—	—	—	—	80	—	—	—	85	—	—	—	—	—	—	—	—	—	85	—	—
August	—	75	—	—	77	—	—	—	—	—	—	—	79	—	—	—	—	—	79	—	—	77	—	—	—	—	77	—	—	—	—
September	—	—	77	—	—	—	—	—	77	—	—	—	—	—	—	—	74	—	—	—	—	—	70	—	—	—	75	—	—	—	—

MISSOURI RIVER MAIN STEM—Continued

6-8180. Missouri River at St. Joseph, Mo.

Temperature (°F) of water, water year October 1968 to September 1969

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October	—	—	—	—	—	—	60	—	—	—	—	—	—	65	—	—	—	60	—	—	—	—	56	—	—	—	—	55	—	—	—
November	55	—	—	—	54	—	—	—	—	—	—	—	51	—	—	—	—	50	—	—	—	40	—	—	—	—	—	—	—	—	—
December	—	—	45	—	—	37	—	—	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
January	—	—	—	—	—	33	—	—	—	—	—	—	—	—	37	—	—	—	—	—	—	—	—	—	—	—	—	32	—	—	—
February	—	—	—	—	38	—	—	—	—	—	34	—	—	—	—	—	—	—	—	—	—	—	—	—	36	—	—	—	—	—	—
March	—	—	33	—	—	—	—	—	—	—	—	—	38	—	—	—	—	—	—	41	—	—	—	—	40	—	—	—	—	—	—
April	41	—	—	—	—	—	44	—	—	—	53	—	—	54	—	—	—	57	—	—	—	52	—	—	—	—	—	54	—	—	—
May	—	—	—	—	64	—	—	—	—	—	—	60	—	—	—	—	—	—	65	—	—	—	—	—	—	64	—	—	—	—	—
June	—	72	—	—	—	—	—	—	72	—	—	—	—	—	—	—	—	—	69	—	—	—	—	74	—	—	—	—	—	76	—
July	—	—	—	—	—	—	—	—	—	—	—	—	—	80	—	—	—	—	—	—	—	80	—	—	—	—	—	—	77	—	—
August	—	—	—	—	—	—	79	—	—	—	—	79	—	—	—	—	—	—	—	—	81	—	—	—	80	—	—	—	—	—	—
September	—	—	77	—	—	—	—	—	—	—	77	—	—	—	—	74	—	—	—	—	—	71	—	—	—	68	—	—	—	70	

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 20, 1950	1050	33	10,700				
Feb. 13, 1951	1015	32	17,600				
Jan. 7, 1953	1515	34	21,600				
Aug. 3, 1953	—	82	—				
Aug. 12, 1953	0910	78	35,100				
Aug. 17, 1953	1000	78	36,600				
Sept. 1, 1953	0915	80	33,900				
Sept. 7, 1953	0850	74	36,200				
Sept. 12, 1953	0850	70	34,300				
Sept. 22, 1953	0700	65	34,000				
Sept. 28, 1953	0715	65	32,800				

PLATTE RIVER BASIN (IOWA-MISSOURI)

6-8189. Platte River at Ravenwood, Mo.

Location.--Lat 40°20'42", long 94°41'10", in SE¼SE¼ sec.14, T.64 N., on downstream side of left pier of bridge on U. S. Highway 136, three-quarters of a mile west of Ravenwood, and 1 mile downstream from Honey Creek.

Drainage area.--486 sq mi.

Discharge records available.--July 1921 to December 1923, May 1924 to May 1925 (gage heights and discharge measurements only), and August 1928 to September 1932, published as "at Conception Junction"; September 1958 to September 1969.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 26, 1945	1610	53	9.19	Dec. 15, 1964	1235	33	91.4
Mar. 29, 1960	1300	33	9,590	Jan. 7, 1965	0915	33	84.1
Feb. 3, 1961	1300	33	16.6	Feb. 15, 1965	0945	34	128
Feb. 10, 1961	1325	33	16.8	Mar. 23, 1965	1430	33	179
Feb. 17, 1961	1320	35	118	Apr. 29, 1965	0850	52	176
Mar. 2, 1961	1050	40	152	May 6, 1965	1510	75	278
May [illegible], 1961	0730	50	90.7	May 20, 1965	1010	67	42.7
May 19, 1961	1430	59	172	June 7, 1965	0905	68	346
June 12, 1961	1330	85	29.2	July 30, 1965	0930	77	24.0
July 14, 1961	1230	80	19.3	Aug. 20, 1965	1120	77	14.7
July 21, 1961	1300	76	48.7	Sept. 14, 1965	1435	77	32.1
Aug. 10, 1961	1700	88	39.2	Oct. 12, 1965	1505	60	47.2
Aug. 28, 1961	1100	80	10.4	Nov. 9, 1965	1120	44	38.0
Sept. 26, 1961	1200	59	107	Dec. 8, 1965	1010	35	34.7
Oct. 6, 1961	1455	64	103	Dec. 22, 1965	0915	34	35.3
Oct. 20, 1961	1430	53	125	Jan. 26, 1966	1530	33	22.9
Dec. 1, 1961	1435	40	213	Mar. 14, 1966	0950	46	98.4
Dec. 18, 1961	1145	34	181	Mar. 25, 1966	0915	36	147
May 4, 1962	1300	73	63.4	Apr. 19, 1966	0905	53	363
May 16, 1962	1145	78	36.7	May 2, 1966	1025	55	78.0
June 4, 1962	1040	66	135	June 7, 1966	1400	68	147
June 8, 1962	0845	71	198	June 13, 1966	0905	73	47.9
June 20, 1962	1550	85	28.2	July 14, 1966	0945	82	25.4
July 6, 1962	1545	88	16.4	July 29, 1966	0905	77	49.2
July 20, 1962	0930	76	54.3	Aug. 10, 1966	0720	69	21.0
Aug. 3, 1962	1405	83	15.9	Aug. 24, 1966	1050	64	40.7
Aug. 20, 1962	1105	81	11.0	Sept. 15, 1966	0935	61	46.8
Aug. 31, 1962	0855	75	68.1	Sept. 28, 1966	1255	65	6.24
Sept. 14, 1962	1140	79	10.7	Oct. 13, 1966	1240	64	73.2
Sept. 28, 1962	1235	65	6.09	Oct. 27, 1966	1125	56	7.49
Oct. 12, 1962	1310	72	16.5	Nov. 14, 1966	1330	44	6.44
Nov. 2, 1962	1230	47	22.5	Dec. 16, 1966	1205	35	6.18
Dec. 14, 1962	1330	34	11.2	Feb. 3, 1967	1340	33	48.5
Mar. 29, 1963	1245	60	115	Feb. 17, 1967	1245	33	33.1
Apr. 15, 1963	0925	56	34.4	Mar. 2, 1967	1430	42	16.8
Apr. 25, 1963	1255	59	60.3	Mar. 17, 1967	1140	37	9.66
May 10, 1963	0850	74	94.6	Mar. 31, 1967	1220	57	37.3
May 29, 1963	1000	64	128	Apr. 19, 1967	0925	57	43.3
June 12, 1963	1200	81	21.4	May 9, 1967	1525	69	48.5
June 21, 1963	1040	72	17.1	May 22, 1967	1015	62	18.4
July 8, 1963	0950	79	18.7	July 6, 1967	0935	68	74.3
July 18, 1963	1140	87	44.4	July 24, 1967	1000	78	22.7
July 29, 1963	0935	80	9.55	Aug. 11, 1967	1155	73	16.9
Aug. 15, 1963	1130	78	10.2	Aug. 22, 1967	1500	82	10.6
Sept. 9, 1963	0945	75	26.8	Sept. 6, 1967	1255	72	6.65
Sept. 23, 1963	0845	63	18.8	Sept. 25, 1967	1300	70	7.89
Oct. 14, 1963	1020	67	7.08	Oct. 20, 1967	1000	48	7.89
Oct. 29, 1963	1020	51	8.93	Nov. 13, 1967	0940	42	6.94
Nov. 19, 1963	1215	48	7.56	Dec. 18, 1967	1020	35	11.1
Dec. 5, 1963	1010	37	13.2	Feb. 26, 1968	1000	34	6.95
Feb. 6, 1964	1000	33	33.6	Mar. 27, 1968	1005	54	6.48
Mar. 11, 1964	1030	40	15.3	Apr. 9, 1968	1335	62	9.35
Mar. 19, 1964	1020	42	13.0	May 28, 1968	1350	69	18.0
Apr. 8, 1964	1350	48	54.4	June 25, 1968	1330	77	11.4
Apr. 13, 1964	1435	58	165	July 18, 1968	1045	77	199
May 14, 1964	1415	69	189	Aug. 28, 1968	1350	77	6.03
May 21, 1964	1435	68	54.5	Sept. 26, 1968	1350	72	5.90
June 8, 1964	1110	76	45.8	Oct. 17, 1968	0935	60	13.6
June 18, 1964	0955	77	198	Oct. 30, 1968	1435	53	4.48
June 30, 1964	0940	77	103	Nov. 26, 1968	1220	39	14.2
July 15, 1964	1310	81	146	May 15, 1969	1035	64	254
July 29, 1964	1010	81	28.4	May 27, 1969	1000	68	189
Aug. 6, 1964	1015	80	17.7	June 26, 1969	1540	76	61.8
Sept. 16, 1964	0955	65	59.2	July 17, 1969	1005	81	106
Oct. 12, 1964	1035	52	39.6	July 23, 1969	0945	75	205
Oct. 29, 1964	1340	56	24.4	Aug. 27, 1969	1500	83	19.7
Nov. 19, 1964	1340	44	57.8				

PLATTE RIVER BASIN (IOWA-MISSOURI)

6-8195. One Hundred and Two River near Maryville, Mo.

Location.--Lat 40°23'15", long 94°49'35", in SE¼SW¼ sec.34, T.65 N., R.35 W., on right bank in back of steel-pile pier of county highway bridge, 2½ miles northeast of Maryville and 3½ miles downstream from Norvey Creek, and at mile 67.0.

Drainage area.--500 sq mi, approximately.

Discharge records available.--October 1932 to September 1969. April to June 1934 monthly discharge only, published in WSP 1310. Prior to June 1934, published as "at Maryville".

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 23, 1945	0830	70	21.3	Feb. 17, 1961	1145	35	112
May 22, 1946	1255	69	58.0	Mar. 2, 1961	1215	42	159
May 23, 1946	1125	64	52.7	May 2, 1961	0620	49	81.6
Aug. 31, 1946	1010	68	4.24	May 19, 1961	1030	54	161
Nov. 4, 1946	1345	50	55.2	June 12, 1961	1135	81	29.5
Dec. 13, 1946	0800	37	5.13	July 14, 1961	0940	70	17.7
Jan. 17, 1947	0840	32	6.26	July 27, 1961	1045	80	23.1
Feb. 20, 1947	0825	33	21.7	Aug. 11, 1961	0915	77	28.0
Apr. 2, 1947	0835	43	42.4	Aug. 28, 1961	0940	72	9.14
Apr. 23, 1947	0850	58	255	Oct. 6, 1961	1400	64	82.9
Apr. 28, 1947	0820	59	95.8	Oct. 20, 1961	1215	50	116
May 12, 1947	1100	62	33.4	Dec. 15, 1961	1445	34	122
July 1, 1947	1000	72	351	Jan. 4, 1962	0910	34	179
July 2, 1947	0945	73	174	May 4, 1962	1105	69	60.0
July 7, 1947	0940	75	12.6	May 16, 1962	0945	72	34.0
July 23, 1947	0950	69	18.2	June 8, 1962	0630	70	210
July 31, 1947	1615	83	10.8	June 20, 1962	0950	75	27.6
Aug. 9, 1947	1430	84	8.36	July 6, 1962	1435	87	16.7
Sept. 4, 1947	1520	84	5.91	July 19, 1962	1600	88	15.7
Oct. 2, 1947	1445	62	4.60	Aug. 8, 1962	0850	79	20.3
Dec. 26, 1947	1500	34	3.84	Aug. 20, 1962	1145	78	11.2
Jan. 6, 1948	0900	34	3.11	Aug. 31, 1962	0740	71	27.4
Mar. 9, 1948	0915	32	11.7	Sept. 14, 1962	1040	73	14.4
Apr. 19, 1948	1000	60	13.1	Sept. 28, 1962	1040	64	8.07
Apr. 20, 1948	1615	65	13.7	Oct. 12, 1962	1110	69	16.4
May 12, 1948	0850	54	42.0	Nov. 2, 1962	1425	48	31.2
May 22, 1948	1545	79	13.3	Dec. 14, 1962	1225	34	13.8
June 7, 1948	1420	83	4.90	Mar. 29, 1963	1100	59	78.6
June 8, 1948	1430	73	5.54	Apr. 15, 1963	1120	56	33.0
July 9, 1948	1130	80	6.48	Apr. 25, 1963	1410	65	60.4
Aug. 25, 1948	1445	79	3.21	May 10, 1963	1120	76	125
Sept. 18, 1948	0850	70	3.01	May 27, 1963	0925	63	123
Sept. 18, 1948	1620	86	3.21	June 10, 1963	0855	74	26.6
Oct. 16, 1948	1630	46	3.33	June 20, 1963	1555	83	19.5
Nov. 30, 1948	0855	31	1.63	July 8, 1963	1125	78	16.0
Dec. 22, 1948	1310	36	4.62	July 18, 1963	1315	88	43.5
Jan. 26, 1949	1030	28	30.7	July 29, 1963	1050	77	7.93
Mar. 16, 1949	0730	30	31.7	Aug. 15, 1963	1225	76	1.68
May 3, 1949	1145	72	29.8	Sept. 9, 1963	1110	74	21.8
Aug. 4, 1949	1600	84	8.84	Sept. 19, 1963	0915	70	31.4
Oct. 12, 1949	1545	66	6.04	Oct. 10, 1963	0945	62	6.02
Nov. 4, 1949	1355	52	4.06	Oct. 18, 1963	1510	68	176
Dec. 5, 1949	1645	33	4.45	Oct. 24, 1963	0945	65	7.91
Jan. 5, 1950	1500	32	3.79	Nov. 19, 1963	1035	45	6.20
Jan. 23, 1950	1000	32	3.95	Dec. 5, 1963	1210	40	7.07
Feb. 20, 1950	0855	32	79.1	Feb. 6, 1964	1110	33	7.26
Mar. 18, 1950	0900	33	17.7	Mar. 11, 1964	1215	44	11.3
June 6, 1950	1010	65	13.9	Mar. 19, 1964	1025	40	7.41
Sept. 8, 1950	1345	69	8.27	Apr. 8, 1964	1450	53	50.0
Oct. 7, 1950	0830	59	68.0	May 14, 1964	1230	66	186
Nov. 3, 1950	1340	47	5.52	May 21, 1964	1655	79	47.0
Dec. 8, 1950	1630	32	2.88	June 5, 1964	1505	67	69.2
Jan. 3, 1951	1415	32	5.14	June 18, 1964	1110	76	159
Sept. 26, 1951	0950	62	60.1	June 30, 1964	1130	79	98.9
Oct. 22, 1951	0910	50	169	July 15, 1964	1205	80	98.0
Dec. 12, 1951	1415	39	73.0	July 29, 1964	0840	79	32.9
Mar. 24, 1952	1145	36	332	Aug. 6, 1964	1140	76	16.3
Oct. 30, 1952	1035	44	5.51	Sept. 16, 1964	1110	65	45.4
Nov. 14, 1952	1030	45	5.85	Oct. 9, 1964	1435	52	31.1
Dec. 8, 1952	1100	36	93.8	Oct. 29, 1964	1505	55	24.3
Jan. 21, 1953	1215	34	43.1	Nov. 17, 1964	1010	48	92.5
Nov. 4, 1953	1400	53	2.51	Dec. 15, 1964	1055	33	34.9
Nov. 25, 1953	1320	37	3.71	Jan. 7, 1965	1040	33	68.0
Jan. 27, 1961	1245	33	10.3	Jan. 25, 1965	0945	33	165
Feb. 3, 1961	1145	33	13.5	Feb. 15, 1965	1125	33	87.3
Feb. 10, 1961	1210	34	16.9	Mar. 23, 1965	1230	33	101

Temperature and Discharge of One Hundred and Two River near Maryville, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 29, 1965	1030	55	147				
May 10, 1965	0950	63	174				
May 20, 1965	1215	72	48.3				
June 7, 1965	1100	71	307				
July 29, 1965	1500	83	39.2				
Aug. 19, 1965	1515	85	14.5				
Sept. 14, 1965	1330	76	49.1				
Oct. 12, 1965	1305	56	40.1				
Oct. 25, 1965	1115	49	55.7				
Nov. 9, 1965	0955	45	35.5				
Nov. 18, 1965	1220	42	44.2				
Dec. 8, 1965	1135	36	30.7				
Dec. 22, 1965	1015	34	23.3				
Jan. 26, 1966	1405	34	22.3				
Mar. 9, 1966	0950	34	91.5				
Mar. 25, 1966	1015	35	113				
Apr. 18, 1966	1455	54	336				
May 2, 1966	1400	66	53.4				
June 7, 1966	1215	71	59.5				
June 23, 1966	1130	78	15.7				
June 28, 1966	1410	73	3,410				
June 29, 1966	1145	77	4,040				
July 14, 1966	1420	91	18.5				
July 27, 1966	1430	88	26.7				
Aug. 9, 1966	1815	71	11.4				
Aug. 22, 1966	0925	63	92.6				
Sept. 15, 1966	1430	70	32.4				
Sept. 28, 1966	1350	63	6.59				
Oct. 26, 1966	1435	57	3.70				
Nov. 14, 1966	1140	44	4.53				
Dec. 16, 1966	1110	34	5.90				
Feb. 3, 1967	0930	33	26.1				
Feb. 20, 1967	1045	33	12.0				
Mar. 2, 1967	0935	34	15.1				
Mar. 17, 1967	1045	34	7.55				
Mar. 31, 1967	1105	55	27.1				
Apr. 18, 1967	1420	65	36.7				
May 9, 1967	1350	68	31.4				
May 23, 1967	1300	75	6.70				
July 6, 1967	1035	70	64.9				
July 24, 1967	1135	78	14.0				
Aug. 11, 1967	1330	78	11.7				
Aug. 22, 1967	1255	80	7.91				
Sept. 6, 1967	1115	67	4.94				
Nov. 26, 1968	1100	39	7.74				
Dec. 16, 1968	1040	33	1.77				
Apr. 2, 1969	1345	48	49.0				
Aug. 26, 1969	1530	80	23.9				

PLATTE RIVER BASIN (IOWA-MISSOURI)

6-8200. White Cloud Creek near Maryville, Mo.

Location.--Lat 40°23'22", long 94°54'33", in NW¼NW¼ sec.1, T.64 N., R.36 W., on downstream side of left pier of bridge on U. S. Highway 71, 4 miles upstream from Big Slough and 4½ miles northwest of Maryville.

Drainage area.--6.06 sq mi.

Discharge records available.--October 1948 to September 1959 (discontinued). Discharge measurements and gage-height records available to September 1969.

Maximum temperature measured,--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 25, 1948	1145	59	24.6
May 3, 1948	1015	59	1.99
Nov. 24, 1948	1125	39	.08
Dec. 22, 1948	1410	35	.11
Jan. 12, 1949	1330	32	.48
Mar. 16, 1949	0945	32	1.09
Apr. 5, 1949	1500	48	1.07
June 6, 1949	1820	79	1.17
Aug. 3, 1949	1520	85	.19
Dec. 5, 1949	1515	33	.08
Jan. 5, 1950	1610	32	.03
Jan. 23, 1950	1100	31	.14
Feb. 20, 1950	1030	32	3.14
Mar. 18, 1950	1050	33	.19
June 6, 1950	1035	67	.36
Aug. 8, 1950	1335	71	3.23
Oct. 7, 1950	1025	59	8.50
Nov. 3, 1950	1420	46	.66
May 17, 1951	1500	70	5.71
Oct. 22, 1951	1100	50	7.83
Nov. 12, 1951	1450	53	22.2
Dec. 5, 1951	1130	39	2.09
Dec. 7, 1951	1210	41	1.28
Feb. 23, 1952	1125	36	.89
Dec. 8, 1952	1300	38	1.00
Jan. 21, 1953	1325	34	.66
Jan. 27, 1961	1100	33	.10
Feb. 3, 1961	1040	33	.16
Feb. 17, 1961	1030	33	.92
Mar. 2, 1961	1350	45	1.95
Mar. 30, 1961	1710	48	3.58
May 1, 1961	1745	57	.47
May 19, 1961	1210	56	1.01
June 9, 1961	1450	78	.53
June 22, 1961	1045	69	1.58
July 14, 1961	0810	67	.26
July 21, 1961	1025	72	.97
Aug. 11, 1961	0830	74	.17
Aug. 24, 1961	1000	65	.11
Sept. 26, 1961	1040	55	1.03
Oct. 6, 1961	1305	62	1.38
Oct. 20, 1961	1055	49	1.45
Dec. 1, 1961	1140	40	2.74
Dec. 15, 1961	1330	34	1.59
Jan. 4, 1962	1010	34	7.61
Jan. 16, 1962	1630	35	1.66
Apr. 2, 1962	1115	38	1.62
May 2, 1962	0930	57	.64
May 16, 1962	0845	72	.27
June 1, 1962	1300	69	1.16
June 20, 1962	1500	79	.20
July 19, 1962	1530	87	.02
Nov. 14, 1962	0945	43	.15
Nov. 30, 1962	1250	44	.16
Dec. 4, 1962	1430	46	.26
Dec. 14, 1962	1130	34	.16
Mar. 29, 1963	1015	57	.46
Apr. 11, 1963	0925	47	.25
Apr. 25, 1963	1505	66	.14
May 10, 1963	1030	74	.11
May 27, 1963	1035	63	.51
June 10, 1963	1025	75	.01
June 20, 1963	1515	81	.02
Mar. 9, 1964	0950	34	.18
Mar. 19, 1964	1305	39	.06
Apr. 8, 1964	1540	51	0.35
Apr. 27, 1964	1420	56	.56
May 14, 1964	1145	66	.33
June 5, 1964	1400	63	.76
June 18, 1964	1300	78	3.05
June 30, 1964	1255	80	.40
July 15, 1964	1120	74	.28
July 29, 1964	0745	70	.13
Nov. 3, 1964	1300	63	.01
Nov. 17, 1964	1115	48	.27
Dec. 15, 1964	1020	33	.10
Apr. 29, 1965	1125	59	.97
May 10, 1965	1100	59	.37
May 20, 1965	1345	72	.34
June 7, 1965	1225	73	.35
July 29, 1965	1430	78	.48
Aug. 19, 1965	1440	78	.05
Oct. 12, 1965	1155	52	.54
Nov. 9, 1965	0855	37	.31
Dec. 6, 1965	1220	37	.25
Dec. 22, 1965	1110	34	.26
Jan. 26, 1966	1300	33	.35
May 9, 1966	1050	34	.60
Apr. 18, 1966	1420	53	.96
May 2, 1966	1155	57	.29
June 7, 1966	1005	64	.08
June 23, 1966	1025	70	.06
Aug. 9, 1966	1645	69	.03
May 9, 1967	1220	56	.26
May 22, 1967	1240	62	.05
Apr. 9, 1968	1120	51	.04
May 14, 1969	1145	64	.79
June 26, 1969	1020	67	.49
July 17, 1969	1220	77	.83

PLATTE RIVER BASIN (IOWA-MISSOURI)

6-8205. Platte River near Agency, Mo.

Location.--Lat 39°41'20", long 94°42'15", in NE¼NW¼ sec.10, T.56 N., R.34 W., on left bank downstream from bridge of U. S. Highway 169, 1½ miles downstream from Third Fork, 3½ miles northeast of Agency, and at mile 66.8.

Drainage area.--1,760 sq mi, approximately.

Discharge records available.--May 1924 to August 1930 (published as "at Agency"), May 1932 to September 1969.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 24, 1945	1610	68	192	July 19, 1961	0850	78	91.0
May 23, 1946	1530	65	305	Aug. 16, 1961	1350	82	135
Sept. 4, 1946	0905	67	32.2	Aug. 31, 1961	0800	76	57.8
Nov. 26, 1946	1415	37	45.1	Apr. 17, 1962	1345	56	487
Dec. 5, 1946	1430	44	36.2	Aug. 9, 1962	1330	78	76.4
Jan. 17, 1947	1315	33	84.0	Aug. 28, 1962	1430	82	74.4
Jan. 22, 1947	1030	33	61.0	Sept. 25, 1962	1310	68	77.9
Feb. 17, 1947	1335	36	257	Nov. 29, 1962	0815	43	117
Mar. 31, 1947	1520	52	193	Jan. 2, 1963	1410	33	72.9
Apr. 17, 1947	1550	55	1,040	Feb. 18, 1963	1515	34	146
Apr. 22, 1947	1535	56	4,360	Apr. 1, 1963	1420	68	3.87
May 7, 1947	1235	56	316	May 20, 1963	1630	68	867
May 16, 1947	0930	66	206	June 3, 1963	1745	82	210
May 22, 1947	1330	64	188	June 13, 1963	1515	81	104
July 11, 1947	1710	81	257	July 1, 1963	1630	91	48.0
July 23, 1947	1335	72	130	July 10, 1963	1600	79	63.3
Aug. 16, 1947	1345	85	78.7	July 15, 1963	1545	84	325
Sept. 11, 1947	1340	77	26.0	July 31, 1963	1615	88	63.3
Oct. 13, 1947	1430	64	23.6	Sept. 3, 1963	1405	85	95.6
Nov. 5, 1947	1400	52	60.9	Sept. 17, 1963	1200	73	309
Dec. 1, 1947	1350	35	27.1	Oct. 8, 1963	1405	79	26.6
Dec. 15, 1947	0800	33	56.6	Oct. 28, 1963	1630	56	43.2
Jan. 5, 1948	1030	32	26.8	Nov. 13, 1963	1400	45	27.3
Jan. 24, 1948	1015	31	18.0	Dec. 31, 1963	1520	34	16.2
Mar. 8, 1948	1145	34	79.3	Jan. 27, 1964	1525	35	61.9
Mar. 17, 1948	1620	39	7,670	Feb. 11, 1964	0900	35	35.7
Apr. 26, 1948	1420	76	1,880	Feb. 25, 1964	1400	35	37.6
May 10, 1948	1630	62	615	Mar. 30, 1964	1600	46	112
May 26, 1948	1530	73	104	Apr. 20, 1964	1405	66	337
June 16, 1948	1515	74	97.7	May 15, 1964	1330	68	524
July 15, 1948	1440	86	1,410	Aug. 18, 1964	1430	91	52.2
July 30, 1948	1700	76	2,050	Sept. 28, 1964	1515	62	416
Aug. 9, 1948	1600	81	124	Oct. 16, 1964	1250	61	134
Aug. 25, 1948	1535	87	41.7	Feb. 18, 1965	1215	37	375
Sept. 3, 1948	1650	78	48.6	Apr. 21, 1965	1115	63	523
Sept. 9, 1948	1630	83	32.7	May 17, 1965	1600	76	224
Sept. 15, 1948	1600	83	28.4	July 12, 1965	1530	83	503
Sept. 29, 1948	1615	69	28.7	Aug. 12, 1965	1630	81	131
Nov. 30, 1948	1100	36	26.5	Aug. 23, 1965	1620	75	133
Feb. 20, 1949	1250	30	4,340	Sept. 15, 1965	1500	75	187
Feb. 26, 1949	1530	32	10,500	Nov. 2, 1965	1500	56	182
May 7, 1949	1445	78	133	Nov. 30, 1965	1530	34	130
Aug. 31, 1949	1640	68	66.2	Dec. 14, 1965	1315	40	212
Sept. 26, 1949	1645	66	54.1	Dec. 21, 1965	1300	38	132
Dec. 1, 1949	1400	40	56.3	Jan. 4, 1966	1600	36	1,880
Dec. 29, 1949	1500	32	45.6	Jan. 24, 1966	1205	33	126
Jan. 17, 1950	1050	30	102	Mar. 1, 1966	1330	38	219
Mar. 2, 1950	0700	35	2,860	Apr. 12, 1966	1540	47	107
Mar. 20, 1950	1610	35	111	May 9, 1966	1435	68	81.3
July 1, 1950	1045	64	81.8	May 17, 1966	1450	65	3,530
Sept. 5, 1950	1510	70	104	June 2, 1966	1100	60	110
Oct. 25, 1950	1500	57	74.2	June 21, 1966	1120	78	172
Nov. 16, 1950	1540	49	74.9	July 26, 1966	1230	85	244
Dec. 18, 1950	1120	32	41.7	Aug. 19, 1966	1645	82	78.2
June 6, 1952	1320	80	286	Sept. 1, 1966	1520	82	40.2
July 1, 1952	1420	87	405	Sept. 20, 1966	1010	64	57.7
Oct. 13, 1952	1230	62	22.8	Oct. 3, 1966	0835	58	24.1
Jan. 13, 1953	1350	34	65.0	Oct. 14, 1966	1235	68	2,530
Nov. 5, 1953	0830	43	4.81	Oct. 17, 1966	0910	48	104
Oct. 27, 1959	1540	56	338	Nov. 14, 1966	1600	49	30.5
Jan. 17, 1961	1520	38	133	Dec. 1, 1966	0710	32	26.5
Feb. 8, 1961	0845	31	50.3	Dec. 12, 1966	0840	32	37.6
Feb. 15, 1961	1550	38	211	Dec. 27, 1966	0945	32	19.6
Mar. 3, 1961	1300	41	514	Jan. 16, 1967	1120	32	24.4
May 4, 1961	1750	54	364	Jan. 23, 1967	0925	32	50.2
May 23, 1961	1255	64	433	Feb. 13, 1967	1625	38	130
June 13, 1961	1530	72	213	Feb. 20, 1967	0915	32	28.2

PLATTE RIVER BASIN (IOWA-MISSOURI)

Temperature and Discharge of Platte River near Agency, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Mar. 6, 1967	1505	46	55.1				
Mar. 22, 1967	0715	44	52.1				
Mar. 28, 1967	1830	48	425				
Apr. 6, 1967	1010	66	144				
Apr. 24, 1967	1650	54	595				
May 9, 1967	0645	56	241				
June 8, 1967	1445	72	1,790				
June 17, 1967	1150	76	6,050				
July 7, 1967	1330	78	315				
July 18, 1967	1155	76	170				
Aug. 1, 1967	1415	84	228				
Aug. 21, 1967	1355	75	46.0				
Sept. 28, 1967	1420	65	41.1				
Oct. 9, 1967	1740	54	301				
Nov. 21, 1967	1440	48	57.7				
Dec. 4, 1967	1525	43	59.5				
Jan. 3, 1968	1640	32	52.8				
Feb. 1, 1968	1635	36	412				
Feb. 13, 1968	1200	32	49.9				
Mar. 12, 1968	1510	44	101				
Apr. 2, 1968	1415	51	47.0				
Apr. 29, 1968	1715	62	438				
June 6, 1968	1935	80	105				
July 10, 1968	1030	79	25.8				
July 30, 1968	1750	86	152				
Aug. 7, 1968	1415	86	460				
Aug. 29, 1968	1000	69	23.2				
Sept. 25, 1968	1305	72	30.0				
Oct. 23, 1968	1605	62	66.9				
Nov. 19, 1968	1030	37	99.6				
Dec. 9, 1968	1740	32	39.9				
Jan. 13, 1969	1240	34	41.9				
Feb. 11, 1969	1615	34	1,270				
Mar. 10, 1969	1615	34	246				
Mar. 19, 1969	1300	51	183				
Apr. 3, 1969	1505	78	220				
Apr. 22, 1969	1400	70	473				
Apr. 28, 1969	1845	54	13,500				
May 12, 1969	1655	64	1,120				
June 19, 1969	1400	76	400				
July 15, 1969	1940	88	595				
July 31, 1969	1245	77	338				
Sept. 3, 1969	1755	75	90.9				

PLATTE RIVER BASIN (IOWA-MISSOURI)

6-8210. Jenkins Branch at Gower, Mo.

Location.--Lat 39°37'29", long 94°36'01", in SW¼NW¼ sec.34, T.56 N., R.33 W., on right bank at upstream side of culvert on U. S. Highway 169, 0.8 mile north of Gower, and 4.4 miles upstream from mouth.

Drainage area.--2.72 sq mi.

Discharge records available.--April 1950 to September 1969.

Maximum temperature measured.--93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
June 10, 1950	1715	78	0.47
July 11, 1950	1530	76	.12
Aug. 7, 1950	1640	69	.32
Sept. 6, 1950	1640	68	.14
Dec. 18, 1950	1145	32	0
Apr. 27, 1951	1545	74	.49
June 20, 1951	1000	70	2.17
June 21, 1951	0900	71	27.4
Aug. 9, 1951	0845	70	2.19
Feb. 14, 1952	1555	34	.93
Mar. 7, 1952	1615	34	1.14
May 27, 1952	1515	69	1.28
June 28, 1952	1500	89	.04
Dec. 2, 1952	1640	35	.05
Jan. 13, 1953	1550	34	.09
Feb. 8, 1961	905	33	.06
Feb. 15, 1961	1340	38	.35
Mar. 3, 1961	1325	48	.65
Mar. 14, 1961	1425	57	5.37
Mar. 29, 1961	1505	50	2.79
Apr. 13, 1961	1040	45	4.51
May 9, 1961	0740	47	3.85
May 23, 1961	1435	66	1.04
June 7, 1961	0925	68	.55
July 6, 1961	1350	78	1.46
July 19, 1961	0750	75	.11
July 27, 1961	1330	92	2.33
Aug. 29, 1961	1335	84	.16
Sept. 12, 1961	0915	71	.36
Oct. 31, 1961	1515	58	6.13
Dec. 5, 1961	0900	36	1.62
Apr. 17, 1962	1535	56	1.00
May 14, 1962	1435	75	.34
May 28, 1962	1650	78	1.34
June 4, 1962	1630	77	1.19
June 19, 1962	1335	81	.48
Aug. 6, 1962	1535	86	.09
Sept. 5, 1962	1340	69	.05
Sept. 25, 1962	1350	66	.06
Oct. 22, 1962	1615	58	.32
Nov. 1, 1962	1310	47	.26
Dec. 5, 1962	1145	40	.11
Jan. 2, 1963	1615	33	.18
Feb. 25, 1963	1620	33	.20
Mar. 25, 1963	1430	60	.45
Apr. 9, 1963	1400	58	.24
May 13, 1963	1630	82	.06
May 21, 1963	1225	63	.41
June 3, 1963	1705	80	.36
June 13, 1963	1315	92	.12
Aug. 1, 1963	1220	76	3.11
Mar. 30, 1964	1520	47	.01
Apr. 20, 1964	1330	67	2.69
Apr. 29, 1964	1515	61	.62
June 6, 1964	1025	62	1.44
June 12, 1964	1100	74	4.37
July 13, 1964	1540	76	.15
July 27, 1964	1430	86	.02
Jan. 5, 1965	1455	36	.44
Feb. 18, 1965	1125	35	.76
Mar. 8, 1965	1615	36	2.00
Apr. 12, 1965	1440	52	.70
Apr. 21, 1965	0840	58	.74
May 17, 1965	1510	76	.22
Aug. 11, 1965	1540	76	.63
Aug. 23, 1965	1545	75	.58
Sept. 10, 1965	1400	70	1.76
Sept. 28, 1965	1455	66	2.41
Nov. 2, 1965	1530	53	.70
Nov. 23, 1965	1330	42	.58
Dec. 7, 1965	1630	38	.63
Dec. 21, 1965	1500	38	.50
Jan. 14, 1966	1350	38	1.07
Feb. 11, 1966	1440	37	1.19
Mar. 1, 1966	1545	38	.68
Apr. 7, 1966	1150	52	.20
May 9, 1966	1610	68	.09
Aug. 19, 1966	1330	89	——
Sept. 19, 1966	1730	65	——
Jan. 23, 1967	1115	34	.10
Feb. 14, 1967	0900	34	.13
Mar. 10, 1967	0825	41	.08
Mar. 21, 1967	1525	53	.04
Apr. 6, 1967	1130	70	.19
Apr. 24, 1967	1430	56	.38
May 9, 1967	0850	56	.33
May 22, 1967	1615	70	.11
June 7, 1967	1750	72	2.17
July 18, 1967	1350	76	.40
Dec. 8, 1967	1230	38	.44
Jan. 3, 1968	1255	32	.26
Jan. 29, 1968	1340	42	1.38
Feb. 13, 1968	1330	35	.36
Mar. 11, 1968	1625	40	.30
Apr. 1, 1968	1715	54	.16
Apr. 29, 1968	1430	65	1.13
June 7, 1968	1435	80	.23
Oct. 23, 1968	1415	58	0
Feb. 11, 1969	1725	33	1.53
Mar. 10, 1969	1405	38	.23
Mar. 19, 1969	1420	55	.17
Apr. 22, 1969	1525	50	.96
May 12, 1969	1805	72	.87
June 19, 1969	1610	79	.37
July 15, 1969	1350	93	.28
Aug. 11, 1969	1830	84	——

PLATTE RIVER BASIN (IOWA-MISSOURI)

6-8211.5 Little Platte River at Smithville, Mo.

Location.--Lat 39°23'20", long 94°34'45", in N½SW¼ sec.23, T.53 N., R.33 W., on left bank behind city equipment shelter on old Bridge abutment, 500 feet upstream from town bridge in Smithville, 1,500 ft upstream from bridge on U. S. Highway 169, and one-half mile downstream from Wilkerson Creek.

Drainage area.--243 sq mi.

Discharge records available.--June 1965 to Sept. 1969. Occasional measurements, 1942, 1943, 1946, 1962-65.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 14, 1962	1610	78	2.93
Sept. 23, 1963	1510	74	.04
Oct. 31, 1963	1250	58	.02
Oct. 28, 1964	0930	59	.03
Aug. 23, 1965	1420	75	21.2
Nov. 23, 1965	1015	40	22.2
Dec. 7, 1965	1330	42	21.8
Dec. 21, 1965	1615	36	22.0
Jan. 10, 1966	1150	33	35.9
Jan. 24, 1966	1535	34	15.4
Feb. 15, 1966	1000	34	53.9
Feb. 28, 1966	1500	36	26.6
May 3, 1966	1105	65	27.4
June 21, 1966	1315	78	27.1
July 26, 1966	1520	82	1.91
Aug. 19, 1966	1155	76	21.7
Sept. 7, 1966	1605	75	.55
Sept. 13, 1966	1500	76	.18
Sept. 19, 1966	1620	62	74.7
Sept. 28, 1966	1215	63	9.18
Oct. 3, 1966	1210	69	1.12
Oct. 10, 1966	0710	47	.01
Oct. 17, 1966	1145	51	.03
Oct. 24, 1966	0805	40	.02
Nov. 1, 1966	1420	43	.03
Nov. 14, 1966	1250	57	.24
Nov. 30, 1966	0820	37	1.07
Dec. 12, 1966	1425	38	1.21
Dec. 27, 1966	1300	32	.98
Jan. 16, 1967	1240	32	2.54
Jan. 23, 1967	1245	42	3.52
Feb. 20, 1967	1155	32	8.30
Mar. 9, 1967	1635	48	3.15
Mar. 21, 1967	1325	52	4.00
Apr. 6, 1967	1250	68	69.8
Apr. 24, 1967	1250	52	41.6
May 9, 1967	1120	58	69.5
May 22, 1967	1500	68	18.9
June 9, 1967	1615	70	157
July 7, 1967	1545	76	62.2
July 17, 1967	1630	76	21.5
July 31, 1967	1545	84	17.7
Aug. 23, 1967	1400	82	4.23
Sept. 12, 1967	1305	71	.08
Oct. 20, 1967	1010	50	55.6
Oct. 30, 1967	1430	50	1,210
Nov. 1, 1967	1330	49	322
Dec. 8, 1967	1000	40	36.4
Dec. 28, 1967	1255	32	45.8
Feb. 1, 1968	1300	34	506
Feb. 13, 1968	1610	32	60.0
Mar. 5, 1968	1310	42	36.5
Apr. 1, 1968	1625	58	19.4
Apr. 29, 1968	1100	58	95.6
June 7, 1968	0920	75	26.8
June 21, 1968	1040	80	10.5
July 29, 1968	1055	86	3.84
Aug. 7, 1968	1010	84	7.27
Aug. 29, 1968	1145	79	3.14
Sept. 19, 1968	0920	79	10.0
Sept. 23, 1968	1845	69	1,160
Oct. 8, 1968	1735	60	9.23
Oct. 16, 1968	1230	64	22.1
Oct. 23, 1968	1000	56	21.0
Nov. 19, 1968	1300	39	42.6
Dec. 16, 1968	1720	32	10.8
Jan. 13, 1969	1505	33	22.7
Jan. 21, 1969	1225	33	79.4
Feb. 14, 1969	1120	32	108
Mar. 10, 1969	1235	33	53.6
Apr. 3, 1969	1040	50	52.4
May 13, 1969	0955	64	78.3
June 13, 1969	1330	68	37.4
July 15, 1969	1240	82	89.0
July 31, 1969	1005	74	30.3
Aug. 11, 1969	1550	81	10.7
Sept. 4, 1969	1005	83	7.37

PLATTE RIVER BASIN

6-8212. Platte River at Platte City, Mo.

Location.--Lat 39°22'10", long 94°47'10", SW¼SW¼ sec.25, T.53 N., R.35 W., at bridge on State Highway 92 at Platte City, Platte County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 14, 1962	1415	82	98.1				
Sept. 24, 1963	1335	68	136				
Oct. 9, 1963	1225	67	50.2				
Oct. 29, 1963	1320	60	82.8				
Oct. 28, 1964	0825	55	140				
Mar. 29, 1967	1040	59	246				
Aug. 22, 1967	1300	75	---				
Sept. 12, 1967	1140	70	47.2				
Sept. 19, 1967	1420	72	60.6				
Oct. 20, 1967	1120	52	---				
Nov. 7, 1967	1430	50	---				
Mar. 12, 1968	1115	42	---				
Apr. 11, 1968	1030	58	165				
May 9, 1968	1040	60	---				
May 22, 1968	0845	59	218				
June 19, 1968	1620	78	185				
July 10, 1968	1715	84	49.9				
Aug. 7, 1968	1415	87	---				
Sept. 17, 1968	1620	66	162				
Oct. 15, 1968	1330	66	183				
Nov. 20, 1968	1210	37	203				
Dec. 11, 1968	1000	34	89.4				
Jan. 22, 1969	1040	34	710				
Feb. 18, 1969	1430	34	516				
Mar. 12, 1969	0930	34	313				
Apr. 9, 1969	0900	54	3,040				
May 7, 1969	0900	68	925				
June 18, 1969	0900	64	1,510				
July 24, 1969	1600	80	1,570				
Aug. 21, 1969	1230	77	418				
Sept. 24, 1969	1315	64	3,050				

6-8930. Missouri River at Kansas City, Mo.

Location.--Lat 39°06'43", long 94°35'16", in sec.32, T.50 N., R.33 W., on downstream side of right pier of Chicago, Burlington & Quincy Railroad bridge at Kansas City, 1.4 miles downstream from Kansas River. River mile, 366.1.

Drainage area.--489,200 sq mi, approximately.

Discharge records available.--October 1897 to September 1969. Prior to August 1928 monthly discharge only, published in WSP 1310. Gage-height records collected at same site 1873-99 are contained in reports of Missouri River Commission; those since 1900 are contained in reports of U. S. Weather Bureau.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 31, 1951	1130	32	7,830
Nov. 7, 1955	0945	32	29,600
Sept. 21, 1956	0915	67	34,900
Sept. 24, 1956	1010	66	35,200
Sept. 29, 1956	1140	67	33,900
Oct. 1, 1956	1040	68	35,700
Oct. 8, 1956	0920	60	36,400
Oct. 11, 1956	1025	63	35,000
Oct. 15, 1956	1100	64	35,800
Oct. 17, 1956	1100	67	37,500
Oct. 19, 1956	1200	66	35,200
Oct. 29, 1956	0910	64	20,100
Oct. 31, 1956	0855	58	20,500
Nov. 6, 1956	1050	53	22,700
May 10, 1963	1000	74	38,200
May 17, 1963	1245	66	66,500
May 20, 1963	0800	65	49,600
May 22, 1963	0805	65	48,000
May 24, 1963	0805	62	43,900
May 27, 1963	1005	65	50,500
May 29, 1963	0805	68	42,100
May 31, 1963	0745	72	40,200
June 3, 1963	0810	76	36,300
June 5, 1963	0750	76	60,200
June 7, 1963	0830	79	59,400
June 10, 1963	0805	81	41,400
June 12, 1963	0800	82	37,600
June 14, 1963	0800	84	37,700
June 19, 1963	1310	78	40,400
July 1, 1963	0750	87	38,200
July 3, 1963	0800	87	44,200
July 5, 1963	0755	86	43,500
July 8, 1963	0810	82	46,600
July 17, 1963	0815	84	41,300
May 12, 1965	0710	67	53,200
June 4, 1965	1010	63	78,800
July 26, 1965	1000	80	63,700
Aug. 23, 1965	0750	71	41,100
Sept, 9, 1965	0825	72	50,100
Sept. 15, 1965	0750	72	54,800
Nov. 5, 1965	0900	56	48,100
Nov. 8, 1965	0750	54	47,400
Jan. 17, 1966	0800	35	28,700
Mar. 10, 1966	0905	37	28,700
Mar. 16, 1966	1300	50	35,800
Mar. 22, 1966	0830	50	38,900
Mar. 28, 1966	0930	47	44,000
Mar. 30, 1966	1345	57	41,600
Apr. 6, 1966	0755	43	45,400
Apr. 8, 1966	0800	42	42,600
Apr. 11, 1966	1000	47	41,300
Apr. 13, 1966	0735	44	44,100
Apr. 15, 1966	1330	48	45,400
Apr. 18, 1966	1500	54	40,200
Apr. 20, 1966	0930	41	44,800
Apr. 22, 1966	1215	42	43,700
Apr. 25, 1966	0915	56	41,700
Apr. 27, 1966	0650	57	41,200
May 2, 1966	1015	61	43,200
May 4, 1966	0735	59	39,600
May 6, 1966	1115	55	37,700
May 10, 1966	1010	50	39,600
May 13, 1966	1305	53	45,300
May 16, 1966	0755	52	41,700
May 18, 1966	0715	56	50,100
May 20, 1966	0800	57	43,300
May 23, 1966	0730	61	40,000
May 25, 1966	0720	69	51,200
May 27, 1966	0715	61	40,400
May 31, 1966	0925	62	38,500
June 3, 1966	1000	59	40,900
June 6, 1966	0920	63	39,900
June 14, 1966	0750	68	99,000
June 16, 1966	0920	74	51,300
June 20, 1966	0720	70	39,800
June 22, 1966	0715	73	37,500
June 24, 1966	0730	73	39,800
June 27, 1966	0855	75	69,500
June 29, 1966	0650	74	58,700
July 1, 1966	1040	78	50,400
July 5, 1966	1005	84	38,900
July 8, 1966	0645	77	42,600
July 11, 1966	1005	83	39,700
July 13, 1966	1040	84	39,200
July 15, 1966	1030	74	38,300
July 18, 1966	0705	82	44,[illegible]00
July 20, 1966	0905	83	38,[illegible]00
July 22, 1966	1020	76	37,000
July 27, 1966	1120	80	39,600
July 29, 1966	0740	70	40,400
Aug. 1, 1966	0825	81	41,000
Aug. 3, 1966	0945	70	41,300
Aug. 5, 1966	1020	76	37,700
Aug. 8, 1966	1000	74	37,700
Aug. 10, 1966	0855	64	41,900
Aug. 12, 1966	1000	72	38,900
Aug. 15, 1966	1220	75	39,400
Aug. 18, 1966	1335	76	44,200
Aug. 22, 1966	1145	76	54,100
Aug. 25, 1966	0945	70	47,000
Aug. 29, 1966	0720	74	43,100
Aug. 31, 1966	0720	73	41,300
Sept. 2, 1966	0750	78	38,900
Sept. 6, 1966	1000	60	46,000
Sept. 9, 1966	0925	71	41,200
Sept. 12, 1966	0930	76	38,200
Sept. 14, 1966	0900	71	39,300
Sept, 16, 1966	1220	68	32,600
Sept, 19, 1966	0955	60	40,900
Sept. 21, 1966	1000	72	38,300
Sept. 26, 1966	1130	65	39,100
Sept. 28, 1966	0740	62	40,900
Sept. 30, 1966	0945	57	40,100
Oct. 3, 1966	0730	60	40,100
Oct. 10, 1966	1325	61	35,500
Oct. 12, 1966	1030	69	37,700
Oct. 14, 1966	0940	69	37,300
Oct. 17, 1966	0940	54	41,900
Oct. 19, 1966	1745	51	43,100
Oct. 21, 1966	0800	55	40,000
Oct. 24, 1966	0800	67	39,500
Oct. 26, 1966	0750	61	38,000
Oct. 28, 1966	0750	62	37,200
Oct. 31, 1966	1100	48	37,700
Nov. 2, 1966	0955	42	40,100
Nov. 7, 1966	1345	62	38,800
Nov. 10, 1966	0830	40	41,300
Nov. 14, 1966	1030	44	39,600
Nov. 16, 1966	0930	46	40,200
Nov. 18, 1966	0925	42	40,000

MISSOURI RIVER MAIN STEM

Temperature and Discharge of Missouri River at Kansas City, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 21, 1966	1330	49	41,800
Nov. 23, 1966	1310	51	41,900
Nov. 25, 1966	0900	54	42,800
Nov. 29, 1966	1520	42	33,800
Dec. 5, 1966	0755	37	18,300
Dec. 9, 1966	1035	37	19,800
Dec. 19, 1966	1340	40	20,900
Jan. 9, 1967	1520	32	11,500
Jan. 16, 1967	0945	33	16,600
Jan. 23, 1967	0740	37	22,500
Jan. 30, 1967	1050	34	18,100
Feb. 10, 1967	1010	42	18,800
Feb. 15, 1967	1325	34	21,200
Feb. 28, 1967	1415	37	13,600
Mar. 8, 1967	0900	35	28,500
Mar. 13, 1967	1000	45	19,900
Mar. 17, 1967	1655	38	19,200
Mar. 20, 1967	1410	41	18,000
Mar. 23, 1967	1525	48	34,100
Mar. 27, 1967	1640	52	43,900
Mar. 29, 1967	1515	54	42,000
Mar. 31, 1967	1245	56	42,300
Apr. 5, 1967	1025	52	46,300
Apr. 7, 1967	1220	56	42,300
Apr. 10, 1967	1130	56	41,600
Apr. 12, 1967	1110	42	42,300
Apr. 15, 1967	0810	49	49,600
Apr. 17, 1967	1530	60	43,300
Apr. 19, 1967	1755	66	38,400
Apr. 21, 1967	1300	62	39,900
Apr. 24, 1967	0945	51	40,200
Apr. 26, 1967	0940	49	40,600
Apr. 28, 1967	0800	51	39,600
May 1, 1967	1250	55	37,900
May 3, 1967	1145	54	37,400
May 5, 1967	1235	51	43,200
May 8, 1967	1435	52	43,100
May 10, 1967	1150	57	39,700
May 12, 1967	0755	56	39,900
May 15, 1967	1020	54	42,800
May 17, 1967	1300	56	38,000
May 19, 1967	0835	60	37,900
May 22, 1967	1220	62	38,200
May 25, 1967	1310	67	36,500
May 29, 1967	0735	67	38,500
May 31, 1967	1340	62	49,000
June 2, 1967	1020	58	75,200
June 5, 1967	1335	66	48,000
June 7, 1967	1325	70	111,000
June 10, 1967	1300	68	123,000
June 14, 1967	1140	67	211,000
June 16, 1967	0815	72	166,000
June 18, 1967	0710	73	190,000
June 22, 1967	0930	71	254,000
June 25, 1967	1030	63	180,000
June 27, 1967	0940	70	148,000
June 29, 1967	0915	70	134,000
July 3, 1967	1355	75	89,000
July 5, 1967	1130	74	70,300
July 7, 1967	0805	74	60,600
July 10, 1967	0730	76	55,500
July 12, 1967	0900	77	60,900
July 14, 1967	0830	73	58,500
July 17, 1967	0730	72	50,800
July 19, 1967	0810	74	53,700
July 21, 1967	1130	76	51,800
July 24, 1967	0830	81	50,500
July 26, 1967	1215	79	52,600
July 28, 1967	0925	78	61,600
July 31, 1967	1240	82	54,200
Aug. 2, 1967	1430	82	52,100
Aug. 4, 1967	1255	80	51,000
Aug. 7, 1967	1110	81	52,800
Aug. 9, 1967	1200	79	48,900
Aug. 11, 1967	0740	79	50,600
Aug. 14, 1967	0800	74	47,400
Aug. 18, 1967	0840	74	42,300
Aug. 21, 1967	1310	76	43,900
Aug. 23, 1967	1205	76	42,800
Aug. 25, 1967	1210	78	40,900
Aug. 28, 1967	0845	74	43,500
Aug. 30, 1967	1330	75	43,300
Sept. 1, 1967	0930	71	41,200
Sept. 5, 1967	1300	70	42,800
Sept. 8, 1967	0755	73	51,000
Sept. 11, 1967	1400	74	42,900
Sept. 13, 1967	1115	70	43,500
Sept. 15, 1967	1345	68	47,900
Sept. 18, 1967	1020	76	40,500
Sept. 22, 1967	1335	68	61,300
Sept, 25, 1967	0850	71	59,500
Sept. 27, 1967	1010	64	53,000
Oct. 9, 1967	1010	63	100,000
Oct. 11, 1967	0915	59	64,600
Oct. 13, 1967	1220	58	51,800
Oct. 16, 1967	1010	56	64,600
Oct. 18, 1967	0755	56	55,000
Oct. 20, 1967	1115	74	47,800
Oct. 23, 1967	1010	56	44,600
Oct. 25, 1967	1010	53	44,700
Oct. 27, 1967	0950	51	46,700
Nov. 1, 1967	0925	49	50,800
Nov. 3, 1967	1035	47	50,100
Nov. 6, 1967	1020	45	47,400
Nov. 9, 1967	0930	46	44,700
Nov. 13, 1967	1340	46	42,400
Nov. 15, 1967	1310	44	43,100
Nov. 17, 1967	0905	47	43,900
Nov. 20, 1967	1020	47	42,900
Nov. 24, 1967	1120	41	42,600
Nov. 27, 1967	0910	42	43,500
Nov. 29, 1967	1120	38	35,900
Dec. 1, 1967	1230	38	31,700
Dec. 5, 1967	1105	43	29,000
Dec. 11, 1967	1020	37	29,900
Dec. 18, 1967	1225	36	27,000
Jan. 4, 1968	0920	35	10,400
Jan. 9, 1968	0930	34	12,300
Jan. 12, 1968	1530	32	13,500
Jan. 22, 1968	0900	34	26,000
Feb. 1, 1968	0910	36	31,000
Feb. 6, 1968	1420	34	29,300
Feb. 12, 1968	1415	32	31,100
Feb. 19, 1968	1215	32	28,100
Feb. 27, 1968	1230	36	25,500
Mar. 1, 1968	1200	36	27,100
Mar. 5, 1968	0955	38	32,200
Mar. 8, 1968	1100	44	30,600
Mar. 11, 1968	1155	40	27,300
Mar. 14, 1968	1125	42	27,200
Mar. 18, 1968	1115	52	25,300
Mar. 22, 1968	1340	40	33,900
Mar. 25, 1968	1420	46	40,600
Mar. 27, 1968	1105	49	37,800
Mar. 29, 1968	1430	55	39,200
Apr. 1, 1968	1335	53	41,500
Apr. 4, 1968	1255	49	45,900
Apr. 8, 1968	1400	52	42,600
Apr. 10, 1968	1355	52	42,000
Apr. 12, 1968	1520	57	40,100
Apr. 15, 1968	1020	54	45,900
Apr. 17, 1968	1100	57	45,300
Apr. 19, 1968	1125	58	45,000
Apr. 22, 1968	1220	57	46,300
Apr. 24, 1968	0805	51	76,300
Apr. 26, 1968	0755	53	58,100
Apr. 29, 1968	0830	54	46,500
May 1, 1968	0850	58	41,700
May 3, 1968	0800	62	41,500
May 6, 1968	1300	62	39,900
May 8, 1968	1315	61	41,400
May 10, 1968	1240	68	45,600
May 13, 1968	1225	62	41,900
May 15, 1968	1530	68	43,200
May 17, 1968	1000	61	42,200
May 20, 1968	1130	60	41,000
May 23, 1968	0820	64	41,800
May 28, 1968	1215	60	47,600
May 31, 1968	0930	60	40,200

Temperature and Discharge of Missouri River at Kansas City, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
June 3, 1968	1720	70	43,200
June 6, 1968	1500	74	38,400
June 12, 1968	1005	77	52,400
June 14, 1968	0750	76	48,200
June 17, 1968	0910	75	46,500
June 21, 1968	0925	75	41,900
June 24, 1968	0950	76	41,600
June 26, 1968	1005	70	48,300
June 28, 1968	0845	72	70,400
July 1, 1968	1005	73	42,800
July 3, 1968	1335	74	43,500
July 10, 1968	1310	77	40,400
July 12, 1968	1055	68	39,300
July 15, 1968	1155	80	40,900
July 17, 1968	1225	80	82,100
July 19, 1968	1130	80	50,300
July 22, 1968	0945	85	42,900
July 29, 1968	1330	79	50,700
July 31, 1968	1100	77	66,400
Aug. 2, 1968	1035	68	79,400
Aug. 5, 1968	1410	78	72,700
Aug. 7, 1968	0910	83	54,100
Aug. 9, 1968	0940	80	48,800
Aug. 14, 1968	1130	77	60,200
Aug. 16, 1968	1245	80	51,400
Aug. 19, 1968	0905	81	48,800
Aug. 21, 1968	1235	83	48,800
Aug. 23, 1968	0810	81	53,000
Aug. 27, 1968	1430	80	42,500
Aug. 30, 1968	0715	71	45,500
Sept. 3, 1968	0955	74	42,500
Sept. 6, 1968	0720	70	50,900
Sept. 9, 1968	0915	68	39,800
Sept. 11, 1968	0800	68	39,700
Sept. 18, 1968	1410	68	40,900
Sept. 20, 1968	0800	77	43,300
Sept, 23, 1968	0840	73	38,600
Sept. 25, 1968	0740	68	41,000
Sept. 27, 1968	1015	74	42,000
Sept. 30, 1968	1300	70	39,300
Oct. 2, 1968	0930	70	40,500
Oct. 4, 1968	0815	64	40,300
Oct. 7, 1968	0930	68	42,100
Oct. 9, 1968	0950	65	49,000
Oct. 11, 1968	0925	62	51,600
Oct. 14, 1968	0920	68	40,500
Oct. 17, 1968	0845	60	41,800
Oct. 18, 1968	1515	60	113,000
Oct. 21, 1968	0900	60	69,900
Oct. 23, 1968	1010	55	55,800
Oct. 25, 1968	1000	55	54,800
Oct. 28, 1968	0850	52	53,900
Oct. 30, 1968	0905	54	48,400
Nov. 1, 1968	0730	56	45,400
Nov. 4, 1968	1025	51	44,400
Nov. 7, 1968	0920	48	44,700
Nov. 12, 1968	0915	42	50,000
Nov. 15, 1968	0930	42	52,700
Nov. 18, 1968	0950	41	48,900
Nov. 20, 1968	0945	41	49,300
Nov. 25, 1968	0920	42	45,600
Nov. 27, 1968	0950	41	47,300
Nov. 29, 1968	0910	40	45,400
Dec. 2, 1968	0915	40	47,800
Dec. 6, 1968	0950	39	47,200
Dec. 10, 1968	0945	34	33,000
Dec. 13, 1968	1010	34	27,000
Dec. 18, 1968	0925	34	15,000
Jan. 14, 1969	0955	34	20,700
Jan. 20, 1969	0930	36	35,100
Feb. 5, 1969	1240	36	26,700
Feb. 10, 1969	0900	34	46,200
Feb. 17, 1969	0955	35	34,700
Feb. 24, 1969	1000	36	43,100
Mar. 4, 1969	0800	36	78,400
Mar. 13, 1969	0900	36	42,500
Mar. 17, 1969	0930	41	43,100
Mar. 24, 1969	1040	34	90,200
Mar. 26, 1969	0840	38	122,000
Mar. 28, 1969	0905	34	98,300
Apr. 1, 1969	0910	42	79,100
Apr. 4, 1969	0800	45	93,300
Apr. 7, 1969	0855	47	119,000
Apr. 9, 1969	0900	44	109,000
Apr. 11, 1969	0555	43	106,000
Apr. 14, 1969	0945	49	115,000
Apr. 16, 1969	0755	58	122,000
Apr. 18, 1969	0930	53	139,000
Apr. 21, 1969	0935	53	101,000
Apr. 23, 1969	0935	58	89,000
Apr. 25, 1969	0735	59	84,200
Apr. 28, 1969	0930	51	180,000
May 1, 1969	0935	60	101,000
May 5, 1969	0950	58	77,000
May 7, 1969	0915	66	71,500
May 9, 1969	0910	62	108,000
May 12, 1969	0910	60	92,500
May 14, 1969	1040	61	71,000
May 16, 1969	1020	66	67,100
May 19, 1969	0945	64	81,800
May 21, 1969	0815	63	73,400
May 23, 1969	0900	57	126,000
May 27, 1969	1030	68	96,200
May 29, 1969	0840	71	84,500
June 2, 1969	0925	69	71,200
June 4, 1969	1000	70	64,200
June 6, 1969	0810	71	60,000
June 10, 1969	0745	71	58,100
June 13, 1969	0725	70	68,500
June 16, 1969	0910	68	66,700
June 18, 1969	0745	69	62,300
June 20, 1969	0905	68	62,300
June 24, 1969	0940	72	96,100
June 30, 1969	0900	76	107,000
July 7, 1969	1045	79	91,700
July 14, 1969	1030	84	81,600
July 16, 1969	0830	85	70,800
July 18, 1969	0830	83	65,200
July 22, 1969	1015	82	78,800
July 25, 1969	1130	82	70,800
July 28, 1969	0920	80	75,700
July 30, 1969	0820	79	72,800
Aug. 1, 1969	0930	79	62,700
Aug. 8, 1969	0845	80	66,700
Aug. 11, 1969	0910	81	66,500
Aug. 13, 1969	0825	80	65,700
Aug. 15, 1969	1005	76	73,000
Aug. 18, 1969	0745	78	64,200
Aug. 20, 1969	0815	77	61,000
Aug. 22, 1969	0830	77	66,500
Aug. 26, 1969	0845	80	63,700
Aug. 29, 1969	0815	81	62,000
Sept. 5, 1969	1030	80	62,300
Sept. 8, 1969	0955	78	76,400
Sept. 10, 1969	1020	78	72,100
Sept. 12, 1969	1015	76	72,300
Sept. 15, 1969	0925	74	66,300
Sept. 19, 1969	1030	72	64,200
Sept. 23, 1969	0940	70	63,500
Sept. 29, 1969	0910	67	59,500

BLUE RIVER BASIN

6-8931. Blue River at State line in southwest Kansas City, Mo.

Location.--Lat 38°51'18", long 94°36'28", near center of west edge of sec.31, T.47 N., R.33 W., Jackson County, at bridge on Missouri-Kansas State line, 0.7 mile downstream from Mill Creek in extreme southwest corner of Kansas City.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 25, 1966	1540	65	52.7				
July 14, 1966	0930	83	.64				
Sept. 8, 1966	1310	74	.23				
Nov. 11, 1966	1345	51	.04				
Dec. 8, 1966	1155	50	.18				
Jan. 12, 1967	1400	42	.46				
Feb. 9, 1967	0810	35	3.42				
Mar. 10, 1967	1415	45	1.15				
Apr. 12, 1967	1200	60	32.5				
May 11, 1967	0740	62	38.2				
July 28, 1967	1730	78	85.8				
Aug. 10, 1967	1320	76	5.11				
Oct. 13, 1967	0900	56	22.2				
Apr. 22, 1968	1635	54	42.3				
May 9, 1968	0915	61	14.8				
June 13, 1968	1030	76	6.49				
Aug. 8, 1968	1040	82	2.90				
Sept. 12, 1968	0925	64	.97				
Oct. 10, 1968	1530	57	14.4				
Nov. 15, 1968	1235	46	321				
Jan. 9, 1969	1000	33	10.6				
Apr. 10, 1969	1620	64	35.2				

BLUE RIVER BASIN

6-8934. Indian Creek at State line in southwest Kansas City, Mo.

Location.--Lat 38°56'31", long 94°36'15", near center of sec.31, T.48 N., R.33 W., Jackson County, at bridge on Voiland Road, 0.5 mile downstream from James Branch in southwest corner of Kansas City, Mo.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 14, 1966	1155	83	4.69				
Oct. 13, 1966	1145	68	3.20				
Nov. 11, 1966	1220	52	3.26				
Dec. 8, 1966	1050	52	5.05				
Jan. 12, 1967	1205	42	5.97				
Feb. 9, 1967	1025	45	10.5				
Mar. 10, 1967	1345	55	7.28				
Apr. 12, 1967	1340	59	127				
May 11, 1967	0805	68	44.2				
July 28, 1967	1300	80	85.5				
Aug. 10, 1967	1435	80	11.9				
Oct. 13, 1967	1130	62	37.7				
Apr. 22, 1968	1535	54	38.6				
May 9, 1968	1010	60	18.9				
June 18, 1968	1535	80	19.4				
Aug. 8, 1968	1230	80	13.2				
Sept. 12, 1968	1045	66	9.17				
Oct. 10, 1968	1330	63	19.4				
Nov. 15, 1968	1415	45	191				
Jan. 9, 1969	1205	33	14.9				
Apr. 10, 1969	1445	64	31.5				

BLUE RIVER BASIN

6-8935. Blue River near Kansas City, Mo.

Location.--Lat 38°57'25", long 94°33'32", in SE¼NE¼ sec.28, T.48 N., R.33 W., on downstream side of right pier of bridge on County Highway W, 0.4 mile downstream from Indian Creek, and 1.7 miles southeast of Kansas City.

Drainage area.--188 sq mi.

Discharge records available.--May 1939 to September 1969.

Maximum temperature measured.--96° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 25, 1945	0800	66	0.97	Sept. 19, 1961	1015	64	165
May 25, 1946	1045	69	50.0	Oct. 23, 1961	1535	58	158
Sept. 5, 1946	1505	81	.40	Nov. 21, 1961	0905	45	233
Dec. 11, 1946	1040	48	55.5	Dec. 12, 1961	0930	36	66.5
Feb. 10, 1947	1230	32	5.83	Jan. 8, 1962	1445	35	198
Mar. 31, 1947	0840	46	79.7	Mar. 19, 1962	1230	48	99.5
May 14, 1947	1350	70	50.3	Apr. 5, 1962	0810	46	95.9
May 29, 1947	1400	61	314	Apr. 11, 1962	1515	67	51.8
June 28, 1947	1100	77	164	May 23, 1962	1240	78	17.2
July 9, 1947	1415	78	27.7	May 31, 1962	1510	77	26.8
July 14, 1947	1515	85	22.7	June 21, 1962	1440	84	12.7
July 26, 1947	1415	80	6.91	July 11, 1962	1600	78	54.6
Aug. 2, 1947	0950	84	2.34	Aug. 20, 1962	1600	87	7.77
Aug. 16, 1947	1025	80	3.29	Sept. 6, 1962	0920	70	8.85
Sept. 27, 1947	1400	67	3.22	Sept. 27, 1962	0815	64	54.4
Oct. 22, 1947	1525	66	.06	Oct. 10, 1962	1410	71	69.4
Nov. 18, 1947	1315	41	17.4	Oct. 26, 1962	1615	54	20.7
Nov. 19, 1947	1055	41	15.1	Nov. 13, 1962	1525	50	14.0
Nov. 20, 1947	1030	43	13.6	Nov. 29, 1962	1410	49	28.0
Dec. 6, 1947	1535	42	150	Dec. 19, 1962	1430	43	16.6
Dec. 20, 1947	0935	34	36.5	Jan. 9, 1963	0825	38	21.5
Jan. 22, 1948	1325	33	43.6	Jan. 30, 1963	1550	32	13.0
Jan. 25, 1948	1040	32	19.1	Feb. 8, 1963	1355	35	36.1
Feb. 9, 1948	1545	32	14.1	Feb. 26, 1963	1430	36	17.7
Apr. 22, 1948	1630	66	28.5	Mar. 21, 1963	0845	46	50.0
May 11, 1948	1625	54	58.8	Apr. 8, 1963	1525	62	27.1
June 21, 1948	1240	68	101	May 1, 1963	1435	65	22.6
June 24, 1948	1010	69	131	May 9, 1963	0815	70	15.6
July 22, 1948	1600	83	3,700	May 20, 1963	1435	68	20.6
Aug. 26, 1948	1545	96	8.15	May 29, 1963	1320	68	116
Sept. 16, 1948	1100	71	5.12	June 11, 1963	1430	82	23.4
Oct. 9, 1948	1345	65	3.06	July 9, 1963	1050	79	16.8
Oct. 28, 1948	1650	56	2.87	July 25, 1963	1330	88	22.7
Jan. 17, 1949	1625	32	128	Aug. 9, 1963	0820	81	10.8
Feb. 28, 1949	1525	32	224	Sept. 27, 1963	0800	66	12.7
Mar. 21, 1949	1710	39	113	Oct. 10, 1963	0820	69	7.94
Apr. 9, 1949	1420	54	91.6	Oct. 25, 1963	0905	68	9.72
May 3, 1949	1430	58	118	Nov. 15, 1963	0810	45	8.62
May 24, 1949	1515	67	195	Dec. 10, 1963	0820	37	7.78
July 13, 1949	1600	86	41.6	Jan. 3, 1964	1400	37	9.17
Dec. 13, 1949	1510	35	27.1	Jan. 16, 1964	0825	37	7.41
Jan. 10, 1950	1120	33	32.2	Jan. 31, 1964	1415	44	43.2
Jan. 27, 1950	1200	32	33.0	Feb. 17, 1964	0800	37	18.9
Feb. 3, 1950	1415	34	30.7	Mar. 10, 1964	0835	41	13.4
Feb. 14, 1950	1645	32	54.0	Mar. 31, 1964	1100	40	23.4
Mar. 3, 1950	1445	36	34.8	Apr. 13, 1964	1045	40	42.6
Mar. 13, 1950	1140	33	33.4	Apr. 29, 1964	1215	60	179
Mar. 30, 1950	1510	42	24.4	May 18, 1964	1235	78	24.3
Apr. 12, 1950	1615	40	34.1	July 6, 1964	1430	85	66.1
May 29, 1951	1335	68	82.0	July 24, 1964	0850	80	28.7
July 28, 1951	1430	84	61.2	Aug. 24, 1964	1500	79	12.0
Aug. 6, 1951	1420	85	24.7	Nov. 6, 1964	0840	59	8.95
Mar. 14, 1952	1545	42	232	Dec. 3, 1964	0835	35	57.0
Mar. 27, 1952	1530	52	254	Jan. 4, 1965	0900	38	119
May 29, 1952	1355	69	32.6	Feb. 16, 1965	1405	39	76.9
July 8, 1952	1200	74	29.0	Mar. 10, 1965	1100	39	370
July 29, 1952	0905	81	3.32	Apr. 9, 1965	0820	60	146
Oct. 8, 1952	1445	61	3.09	Apr. 23, 1965	0805	62	73.4
Dec. 11, 1952	1525	52	6.72	May 5, 1965	0800	72	39.7
Jan. 19, 1953	1525	36	4.69	June 4, 1965	0845	74	61.1
Oct. 15, 1959	1640	60	32.3	June 15, 1965	0835	69	239
Nov. 10, 1959	1600	55	13.2	July 28, 1965	1515	78	143
Jan. 27, 1961	1520	33	9.53	Aug. 9, 1965	0945	75	24.8
Apr. 3, 1961	1025	45	20.3	Sept. 10, 1965	0830	76	86.7
June 5, 1961	1450	78	59.5	Sept. 30, 1965	0820	65	133
July 21, 1961	1440	78	225	Nov. 16, 1965	0825	52	44.6
Aug. 23, 1961	1450	68	79.3	Dec. 10, 1965	0855	42	20.1
Aug. 30, 1961	0905	80	18.1	Dec. 21, 1965	1425	43	20.2

BLUE RIVER BASIN

Temperature and Discharge of Blue River near Kansas City, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 13, 1966	1425	38	34.9				
Feb. 1, 1966	1240	35	16.3				
Feb. 25, 1966	0815	36	33.5				
Mar. 9, 1966	1030	34	25.0				
Mar. 29, 1966	0930	47	37.8				
May 12, 1966	0900	58	51.5				
June 6, 1966	0700	56	39.0				
June 13, 1966	0920	64	3,120				
July 14, 1966	1320	91	15.2				
Aug. 29, 1966	1220	79	15.7				
Sept. 8, 1966	1015	76	14.5				
Sept. 27, 1966	1040	64	12.5				
Nov. 11, 1966	0915	46	9.32				
Dec. 8, 1966	0930	48	26.9				
Jan. 5, 1967	1620	36	10.1				
Jan. 12, 1967	1040	36	11.5				
Jan. 23, 1967	0945	44	12.1				
Feb. 9, 1967	1205	40	28.4				
Feb. 21, 1967	1335	42	17.8				
Mar. 10, 1967	1220	49	19.6				
Mar. 23, 1967	1050	56	15.7				
Apr. 6, 1967	0915	51	148				
Apr. 12, 1967	1445	59	248				
Apr. 21, 1967	1600	66	146				
May 11, 1967	0955	63	113				
July 5, 1967	1450	70	99.9				
July 24, 1967	1040	82	23.2				
Aug. 22, 1967	0845	72	15.8				
Oct. 26, 1967	1130	54	102				
Nov. 22, 1967	1450	39	74.2				
Dec. 6, 1967	1230	45	88.5				
Jan. 23, 1968	0905	37	83.6				
Feb. 27, 1968	1530	67	50.5				
Apr. 4, 1968	1635	52	207				
May 9, 1968	1430	61	44.4				
May 23, 1968	1305	60	1,010				
June 13, 1968	1335	77	33.8				
July 10, 1968	1450	86	9.78				
Aug. 8, 1968	1325	86	39.3				
Aug. 28, 1968	1235	77	32.3				
Sept. 12, 1968	1155	64	20.2				
Sept. 24, 1968	1400	72	29.2				
Oct. 10, 1968	1110	59	38.3				
Oct. 24, 1968	1100	54	20.0				
Nov. 19, 1968	1230	42	63.4				
Dec. 17, 1968	1120	34	30.3				
Feb. 6, 1969	0910	34	829				
Feb. 19, 1969	1105	37	98.0				
Apr. 9, 1969	1230	63	91.0				
Apr. 24, 1969	1345	63	111				
May 15, 1969	1035	68	28.2				
June 4, 1969	1200	68	64.2				
July 16, 1969	1600	87	70.6				
Aug. 26, 1969	1515	78	26.4				
Sept. 4, 1969	1640	78	17.5				
Sept. 24, 1969	1025	68	33.6				

BLUE RIVER BASIN

6-8935.3 Blue River at 63rd St. in Kansas City, Mo.

Location.--Lat 39°00'51", long 94°31'30", in NE¼SW¼NE¼ sec.2, T.48 N., R.33 W., Jackson County, at bridge on 63rd Street in central Kansas City, 3.3 miles upstream from Brush Creek.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 10, 1967	1000	40	34.0				
Mar. 10, 1967	1105	44	16.5				
Mar. 13, 1967	1425	41	16.1				
May 11, 1967	1205	62	126				
Aug. 11, 1967	1200	74	30.7				
Oct. 13, 1967	1440	60	87.3				
May 9, 1968	1500	64	52.5				
May 23, 1968	1610	56	1,170				
June 18, 1968	1735	75	55.9				
Aug. 8, 1968	1620	86	45.3				
Sept. 12, 1968	1425	65	19.0				
Oct. 10, 1968	0855	59	56.9				
Nov. 15, 1968	1700	44	1,060				
Apr. 10, 1969	1010	59	132				

ROCK CREEK BASIN

6-8936. Rock Creek at Independence, Mo.

Location.--Lat 39°04'37", long 94°27'03", in NW¼SW¼SE¼ sec.9, T.49 N., R.32 W., on left bank near upstream side of bridge on Northern Blvd. in Independence, 1/4 mile south of 23rd Street and 4 miles upstream from mouth.

Drainage area.--5.20 sq mi.

Discharge records available.--August 1967 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 3, 1967	1430	70	.32				
Nov. 22, 1967	1330	42	1.25				
Dec. 19, 1967	1540	41	.99				
Jan. 3, 1968	1435	33	.70				
Jan. 31, 1968	1020	44	1.18				
Mar. 11, 1968	1435	44	.54				
Apr. 10, 1968	1635	68	.35				
Apr. 30, 1968	1500	69	.96				
July 29, 1968	1510	82	.42				
Aug. 2, 1968	0900	64	165				
Aug. 28, 1968	0740	69	.41				
Nov. 12, 1968	1620	40	.53				
Feb. 6, 1969	1535	41	7.83				
Apr. 2, 1969	1510	51	1.06				
June 22, 1969	1635	69	31.6				
July 18, 1969	1610	78	1.21				
Aug. 22, 1969	1215	74	.92				
Sept. 26, 1969	1500	69	1.99				

LITTLE BLUE RIVER BASIN

6-8937.9 Little Blue River at Longview Road in Kansas City, Mo.

Location.--Lat 38°54'20", long 94°28'00", in SW¼SW¼ sec.4, T.47 N., R.32 W., on downstream side of left main pier of bridge on Longview Road in Kansas City and 3.5 miles upstream from Cedar Creek.

Drainage area.--47.4 sq mi.

Discharge records available.--August 1966 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 29, 1966	1535	84	2.60				
Sept. 27, 1966	1315	62	1.73				
Oct. 11, 1966	1300	63	1.19				
Oct. 25, 1966	0905	46	4.94				
Dec. 1, 1966	1610	36	2.67				
Dec. 13, 1966	1230	36	2.77				
Jan. 5, 1967	1350	32	3.33				
Jan. 23, 1967	1220	43	2.79				
Feb. 9, 1967	1445	39	5.97				
Feb. 21, 1967	1110	38	3.80				
Mar. 9, 1967	1555	46	3.15				
Mar. 23, 1967	1245	58	3.27				
Apr. 6, 1967	1150	52	68.0				
Apr. 13, 1967	0915	59	811				
Apr. 20, 1967	1030	61	25.8				
May 2, 1967	0830	56	9.71				
May 19, 1967	1510	78	10.3				
June 16, 1967	1115	69	57.6				
June 30, 1967	1345	76	60.0				
July 5, 1967	1335	70	68.0				
July 27, 1967	1100	80	41.2				
Aug. 11, 1967	1000	74	4.40				
Aug. 22, 1967	1120	80	2.00				
Sept. 20, 1967	1515	73	38.7				
Oct. 13, 1967	1530	65	9.84				
Oct. 26, 1967	1255	50	12.6				
Nov. 22, 1967	1220	33	13.3				
Dec. 6, 1967	0945	46	23.6				
Jan. 3, 1968	0955	36	12.0				
Feb. 27, 1968	1730	45	11.3				
Mar. 11, 1968	1030	42	8.07				
Apr. 8, 1968	1545	56	7.91				
Apr. 30, 1968	1150	67	13.0				
June 18, 1968	1120	73	10.5				
July 10, 1968	1655	86	6.61				
July 26, 1968	1235	77	93.4				
Aug. 6, 1968	0945	80	10.0				
Aug. 9, 1968	1150	75	87.5				
Aug. 28, 1968	1450	75	6.28				
Sept. 24, 1968	1610	74	7.94				
Oct. 10, 1968	1730	64	8.37				
Oct. 24, 1968	0910	50	3.90				
Nov. 15, 1968	1030	47	154				
Dec. 1, 1968	0950	33	7.05				
Jan. 24, 1969	1355	33	17.5				
Feb. 6, 1969	1050	35	187				
Feb. 19, 1969	1315	42	18.4				
Apr. 3, 1969	1030	50	15.8				
May 9, 1969	1055	60	21.0				
June 4, 1969	1010	68	20.4				
June 27, 1969	1010	71	653				
Sept. 4, 1969	1440	81	3.26				
Sept. 14, 1969	1240	68	13.3				

LITTLE BLUE RIVER BASIN

6-8940. Little Blue River near Lake City, Mo.

Location.--Lat 39°06'00", long 94°18'00", in SW¼SE¼ sec.35, T.50 N., R.31 W., at downstream side of right pier of upstream bridge on dual State Highway 78, 3 miles southwest of Lake City, and 10½ miles upstream from mouth.

Drainage area.--184 sq mi.

Discharge records available.--March 1948 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Mar. 18, 1948	1550	45	155	Aug. 24, 1964	1755	72	14.9
Mar. 20, 1948	1100	60	4,520	Sept. 18, 1964	1220	69	46.2
Mar. 20, 1948	1510	68	4,080	Oct. 6, 1964	1510	54	10.0
Mar. 26, 1948	0940	47	1,050	Nov. 3, 1964	1135	64	12.4
Apr. 23, 1948	1425	66	36.0	Dec. 3, 1964	1235	36	31.2
May 15, 1948	1040	65	31.0	Apr. 21, 1965	1455	62	87.8
July 23, 1948	1000	76	1,930	May 10, 1965	1355	76	41.0
Aug. 10, 1948	1545	76	56.8	June 7, 1965	1545	70	48.8
Aug. 27, 1948	0845	82	12.9	July 15, 1965	1350	75	90.8
Sept. 21, 1948	1020	69	19.2	July 28, 1965	0930	74	359
Nov. 15, 1948	1510	54	11.2	Aug. 19, 1965	1410	78	73.5
Dec. 1, 1948	1550	36	14.9	Aug. 26, 1965	1250	78	41.0
Feb. 17, 1949	1610	34	576	Sept. 10, 1965	1015	76	62.2
Dec. 14, 1949	0930	31	1.74	Nov. 18, 1965	1155	40	32.0
Jan. 10, 1950	1300	33	88.3	Dec. 10, 1965	1035	42	32.4
Jan. 27, 1950	1300	32	93.7	Jan. 5, 1966	1000	38	53.0
Feb. 15, 1950	0915	32	153	Jan. 21, 1966	1035	33	38.4
Mar. 13, 1950	1455	33	54.3	Feb. 4, 1966	1010	33	10.6
Apr. 12, 1950	0745	34	48.5	Feb. 21, 1966	1500	34	45.8
May 14, 1951	1510	64	102	Mar. 8, 1966	1400	36	34.0
June 15, 1951	1400	70	42.9	Mar. 29, 1966	1500	47	58.5
Oct. 21, 1952	1500	47	2.18	May 11, 1966	1330	51	41.1
Dec. 5, 1952	1425	36	5.87	May 31, 1966	1600	64	34.6
Dec. 17, 1952	1345	38	4.18	June 21, 1966	1100	78	121
Oct. 14, 1959	0900	61	35.0	July 21, 1966	1435	76	11.9
Nov. 11, 1959	0850	50	16.6	Aug. 4, 1966	1510	76	16.4
Feb. 3, 1961	1600	33	16.1	Aug. 17, 1966	1300	82	89.9
Feb. 10, 1961	1455	35	20.7	Aug. 24, 1966	1135	63	25.6
Feb. 27, 1961	1520	41	72.3	Sept. 15, 1966	0930	66	25.7
June 7, 1961	1100	82	51.9	Sept. 27, 1966	1430	60	18.1
June 27, 1961	1000	73	38.5	Oct. 11, 1966	1525	57	4.72
July 20, 1961	0935	78	22.8	Oct. 24, 1966	1620	50	14.9
Aug. 17, 1961	1010	78	19.3	Dec. 1, 1966	1335	38	15.6
Aug. 31, 1961	1445	81	16.4	Dec. 13, 1966	1510	33	13.1
Apr. 3, 1962	0910	45	114	Jan. 3, 1967	1505	32	17.0
May 8, 1962	1515	71	35.1	Jan. 23, 1967	1410	36	20.0
May 22, 1962	0920	75	37.9	Feb. 9, 1967	1120	34	35.3
May 31, 1962	1305	78	53.5	Feb. 23, 1967	1110	33	21.1
June 21, 1962	1235	82	12.6	Mar. 15, 1967	1345	41	18.3
July 10, 1962	0825	78	16.6	Mar. 30, 1967	1100	64	41.9
Aug. 2, 1962	1400	76	7.78	Apr. 6, 1967	1630	50	211
Aug. 27, 1962	1455	74	9.63	Apr. 14, 1967	1020	56	1,990
Sept. 6, 1962	0745	63	20.5	Apr. 20, 1967	1325	63	193
Sept. 19, 1962	1125	70	23.8	May 1, 1967	0930	60	63.5
Sept. 27, 1962	1045	65	24.1	May 8, 1967	0950	53	570
Oct. 29, 1962	1025	53	24.6	May 18, 1967	1255	63	60.3
Nov. 14, 1962	1535	49	19.7	June 5, 1967	1650	67	276
Nov. 30, 1962	1505	47	24.9	June 21, 1967	1710	70	3,410
Dec. 13, 1962	1135	35	11.7	July 5, 1967	1100	71	163
Jan. 30, 1963	1410	32	13.3	Aug. 17, 1967	1315	76	20.7
Feb. 28, 1963	0940	33	18.4	Aug. 22, 1967	1505	71	15.4
Mar. 21, 1963	1515	47	34.7	Sept. 20, 1967	0845	68	34.1
Apr. 8, 1963	1335	62	23.5	Oct. 3, 1967	1650	64	28.2
Apr. 26, 1963	1155	57	12.6	Nov. 17, 1967	1430	48	74.5
May 9, 1963	1155	70	16.4	Dec. 6, 1967	1440	46	165
May 20, 1963	1600	65	29.3	Jan. 8, 1968	0955	33	44.7
July 9, 1963	0900	74	8.50	Jan. 23, 1968	1235	37	162
July 24, 1963	1510	84	19.0	Feb. 29, 1968	0855	22	58.4
Aug. 16, 1963	1030	71	10.9	Mar. 11, 1968	1205	43	38.6
Sept. 18, 1963	1535	72	9.82	Apr. 30, 1968	1400	61	73.7
Nov. 26, 1963	1550	46	16.1	June 4, 1968	1415	65	181
Jan. 24, 1964	0905	36	16.2	June 20, 1968	0935	71	71.3
Feb. 3, 1964	1210	40	18.6	July 12, 1968	1420	85	20.1
Feb. 17, 1964	1030	35	10.3	Aug. 6, 1968	1230	84	90.3
Mar. 11, 1964	1305	42	9.72	Aug. 28, 1968	1655	76	45.0
Apr. 13, 1964	1420	59	58.1	Oct. 22, 1968	1025	60	1,110
May 18, 1964	1400	74	26.6	Nov. 19, 1968	1125	41	142
July 24, 1964	1050	85	21.4	Dec. 17, 1968	1415	34	41.4

Temperature and Discharge of Little Blue River near Lake City, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 9, 1969	0935	32	648				
Feb. 19, 1969	1545	39	127				
May 15, 1969	0925	66	77.8				
June 22, 1969	1515	66	2,940				
July 17, 1969	1035	82	102				
Aug. 22, 1969	1330	75	97.0				
Sept. 4, 1969	1010	75	33.6				
Sept. 29, 1969	1415	67	56.2				

FISHING RIVER BASIN

6-8945. East Fork Fishing River at Excelsior Springs, Mo.

Location.--Lat 39°20'20", long 94°12'45", in SE¼SE¼ sec.1, T.52 N., R.30 W., on downstream side of right abutment of Golf Hill Bridge in Excelsior Springs, three-quarters of a mile upstream from Dry Fork Fishing River, and 6-3/4 miles upstream from mouth.

Drainage area.--20.0 sq mi.

Discharge records available.-- October 1950 to September 1969. October 1950 to January 1951 monthly discharge only published in WSP 1730.

Maximum temperature measured.--96° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 27, 1951	1000	63	4.34	Apr. 13, 1964	1425	60	5.08
May 15, 1951	1000	66	5.39	Apr. 27, 1964	1540	52	45.5
June 15, 1951	0940	69	.81	Apr. 30, 1964	0840	53	14.4
July 21, 1951	1520	70	5.74	May 11, 1964	1415	70	4.67
Sept. 10, 1951	1540	70	29.3	June 23, 1964	1020	71	71.8
Oct. 2, 1951	1055	70	3.70	June 24, 1964	0825	68	26.7
Nov. 9, 1951	1120	34	5.08	July 6, 1964	1645	88	3.05
Nov. 29, 1951	1510	40	4.22	July 24, 1964	1440	90	.33
Dec. 6, 1951	1410	40	7.31	Aug. 12, 1964	1625	78	.23
Feb. 25, 1952	1040	36	5.67	Aug. 25, 1964	1805	74	.06
Mar. 17, 1952	0910	40	17.0	Nov. 3, 1964	1330	64	.17
Sept. 17, 1952	1445	83	.24	Nov. 16, 1964	1350	54	25.8
Oct. 21, 1952	1015	56	.09	Dec. 3, 1964	1415	36	2.21
Dec. 5, 1952	0950	34	.06	Dec. 16, 1964	1205	36	3.57
Dec. 17, 1952	0955	35	.02	Jan. 6, 1965	1510	43	10.2
Jan. 22, 1953	1120	34	.15	Feb. 8, 1965	1520	36	18.4
Oct. 14, 1959	1640	62	2.11	Mar. 4, 1965	1420	36	20.6
Nov. 11, 1959	1600	49	1.38	Mar. 11, 1965	1140	37	33.0
Feb. 10, 1961	1210	38	.25	Apr. 6, 1965	1540	62	53.8
Feb. 16, 1961	0745	35	.24	Apr. 27, 1965	1245	53	8.92
Feb. 21, 1961	1530	38	3.22	May 4, 1965	1435	74	5.37
Mar. 13, 1961	1400	42	152	May 25, 1965	1410	84	.89
Apr. 5, 1961	1010	54	10.5	June 8, 1965	1120	75	2.58
Apr. 26, 1961	1425	62	17.1	June 17, 1965	1415	70	3.70
May 17, 1961	1005	58	27.5	July 8, 1965	1425	85	1.76
June 7, 1961	0835	82	2.42	July 28, 1965	1105	78	4.91
June 22, 1961	1415	82	1.49	Aug. 10, 1965	1345	85	.78
July 13, 1961	1020	70	.92	Aug. 14, 1965	1520	75	28.6
July 20, 1961	1355	80	.38	Oct. 13, 1965	1525	57	2.27
Aug. 10, 1961	1715	78	5.00	Nov. 18, 1965	1600	40	1.73
Aug. 31, 1961	1215	80	.37	Dec. 21, 1965	1050	37	1.94
Sept. 19, 1961	0825	67	5.52	Jan. 5, 1966	1200	42	4.88
Oct. 16, 1961	1100	56	11.2	Jan. 21, 1966	1305	35	1.93
Oct. 26, 1961	0835	49	2.94	Feb. 15, 1966	1510	36	2.86
Nov. 9, 1961	1130	45	14.0	Feb. 21, 1966	1000	33	2.07
Dec. 9, 1961	1135	41	6.57	Mar. 8, 1966	1100	36	1.77
Dec. 28, 1961	1350	34	7.22	Mar. 24, 1966	0910	36	3.99
Feb. 1, 1962	1340	35	43.4	Apr. 26, 1966	1625	67	12.0
Apr. 3, 1962	1150	43	10.0	May 25, 1966	1500	64	1.68
Apr. 19, 1962	1120	64	4.81	July 22, 1966	1030	83	.22
May 3, 1962	1330	72	2.59	Aug. 3, 1966	1535	76	.03
May 22, 1962	1130	80	1.48	Aug. 24, 1966	1630	61	.20
June 21, 1962	1050	79	.63	Sept. 15, 1966	1330	64	.23
July 10, 1962	1050	85	1.31	Oct. 13, 1966	0740	61	.14
Aug. 2, 1962	1215	81	.07	Oct. 24, 1966	1050	50	.14
Sept. 5, 1962	0800	64	.16	Nov. 30, 1966	1250	43	.08
Oct. 29, 1962	1430	55	.50	Dec. 14, 1966	1015	38	.09
Nov. 14, 1962	1350	47	.32	Jan. 24, 1967	1630	38	1.94
Nov. 30, 1962	1345	47	.46	Feb. 9, 1967	1450	35	1.14
Dec. 13, 1962	1325	35	.19	Feb. 23, 1967	1410	36	1.22
Jan. 8, 1963	1240	38	1.02	Mar. 24, 1967	1405	52	1.02
Feb. 7, 1963	1600	34	4.38	Apr. 11, 1967	1625	44	5.48
Feb. 28, 1963	1515	37	.62	Apr. 25, 1967	1455	43	6.89
Mar. 6, 1963	1500	38	14.8	May 4, 1967	0840	52	2.01
Mar. 19, 1963	1555	45	3.08	May 16, 1967	1735	60	6.03
Apr. 25, 1963	1730	60	.42	June 15, 1967	1200	73	33.4
May 9, 1963	1450	81	3.67	June 28, 1967	1025	64	131
May 15, 1963	1200	65	1.38	July 6, 1967	1355	74	5.98
May 22, 1963	1415	67	4.81	July 27, 1967	1320	84	1.40
May 27, 1963	1510	70	36.1	Aug. 11, 1967	1405	84	.19
June 6, 1963	1510	82	1.92	Aug. 24, 1967	0945	74	.10
June 20, 1963	1605	83	.40	Oct. 16, 1967	1045	53	50.1
Aug. 8, 1963	1325	96	.23	Nov. 15, 1967	1135	44	6.10
Aug. 27, 1963	1530	74	.15	Dec. 7, 1967	1400	45	3.62
Mar. 11, 1964	1140	40	.54	Jan. 8, 1968	1255	33	3.36
Mar. 27, 1964	0720	34	2.37	Jan. 31, 1968	1425	43	9.55

FISHING RIVER BASIN

Temperature and Discharge of East Fork Fishing River at Excelsior Springs, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 29, 1968	1510	63	4.09				
Mar. 15, 1968	1225	45	2.82				
Apr. 11, 1968	0950	54	4.66				
May 6, 1968	1215	60	5.76				
June 7, 1968	1255	78	3.71				
July 11, 1968	1425	91	.16				
Aug. 6, 1968	1005	27	.51				
Sept. 19, 1968	1155	43	.09				
Sept. 24, 1968	0905	67	16.2				
Oct. 24, 1968	1050	52	.56				
Nov. 27, 1968	1005	41	1.61				
Jan. 9, 1969	1425	32	1.41				
Jan. 16, 1969	1120	34	93.8				
Feb. 7, 1969	0920	34	46.8				
Apr. 2, 1969	0900	43	6.67				
May 13, 1969	1300	59	13.8				
May 22, 1969	1005	55	113				
July 15, 1969	0805	80	8.18				
July 31, 1969	1835	82	.91				
Sept. 4, 1969	1400	79	.36				
Sept. 26, 1969	0930	63	1.39				

CROOKED RIVER BASIN

6-8950. Crooked River near Richmond, Mo.

Location.--Lat 39°20'00", long 93°58'45", in NW¼NW¼ sec.7, T.52 N., R.27 W., on downstream side of third pier from left end of bridge on State Highway 13, 4 miles north of Richmond, 8½ miles upstream from West Fork Crooked River, and 2½ miles upstream from mouth.

Drainage area.--159 sq mi.

Discharge records available.--March 1948 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 21, 1948	1640	65	17.8	July 17, 1963	1445	85	1.63
May 14, 1948	1430	63	33.5	July 25, 1963	1005	82	1.12
July 23, 1948	1610	85	17.0	Aug. 8, 1963	1145	86	2.67
Sept. 15, 1948	1650	69	1.49	Aug. 27, 1963	1355	76	1.42
Oct. 19, 1948	0845	46	.49	Sept. 19, 1963	1535	79	.17
Nov. 12, 1948	1145	44	4.78	Oct. 24, 1963	1425	76	.03
Dec. 1, 1948	1300	35	5.74	Dec. 4, 1963	1440	42	.61
Feb. 11, 1949	1830	32	7.78	Jan. 24, 1964	1135	36	.80
Dec. 14, 1949	1210	31	6.52	Feb. 4, 1964	1425	43	.90
Jan. 10, 1950	1645	32	76.2	Feb. 17, 1964	1625	36	2.68
Jan. 27, 1950	1640	32	60.2	Mar. 11, 1964	0940	41	3.69
Feb. 15, 1950	1200	34	82.0	Mar. 27, 1964	0855	40	15.2
Mar. 14, 1950	1110	32	49.1	Apr. 13, 1964	1540	60	31.5
Apr. 13, 1950	1055	41	53.4	May 11, 1964	1535	66	27.4
June 12, 1950	1845	76	11.2	July 24, 1964	1315	82	4.78
Oct. 9, 1950	1550	57	1.75	Aug. 25, 1964	0730	68	1.04
Nov. 30, 1950	1320	37	.94	Sept. 15, 1964	1315	72	.38
Apr. 27, 1951	1325	64	42.0	Oct. 6, 1964	1240	61	.28
May 15, 1951	1150	67	37.9	Nov. 3, 1964	1450	67	.26
June 15, 1951	1110	68	7.35	Dec. 22, 1964	1345	34	8.60
Aug. 4, 1951	1020	80	10.4	Jan. 6, 1965	1710	39	59.4
Nov. 9, 1951	1230	39	38.2	Feb. 11, 1965	0920	35	196
May 27, 1952	1235	67	23.9	Apr. 20, 1965	1340	62	49.2
Oct. 21, 1952	1305	55	1.31	May 4, 1965	1245	70	37.7
Nov. 12, 1952	1620	46	2.25	May 25, 1965	1235	74	11.3
Dec. 5, 1952	1130	36	4.97	June 8, 1965	1335	71	42.8
Dec. 17, 1952	1125	38	3.07	June 16, 1965	1040	71	75.0
Jan. 22, 1953	1345	38	4.17	July 8, 1965	1245	75	32.2
Sept. 8, 1953	1300	71	.04	July 21, 1965	1120	80	6,880
Mar. 5, 1958	1000	36	88.9	July 28, 1965	1500	78	42.5
Oct. 14, 1959	1520	60	8.47	Aug. 10, 1965	1210	71	9.53
Feb. 3, 1961	1140	33	1.20	Aug. 26, 1965	1000	73	9.71
Feb. 10, 1961	1050	34	1.44	Oct. 13, 1965	1630	54	15.4
Feb. 16, 1961	0845	33	4.13	Nov. 9, 1965	1145	42	14.4
Feb. 21, 1961	1400	38	26.2	Nov. 19, 1965	1410	45	19.0
Apr. 5, 1961	0730	52	72.4	Dec. 21, 1965	0920	35	12.6
June 7, 1961	0650	78	16.0	Jan. 5, 1966	1350	38	35.3
June 22, 1961	1230	75	7.38	Jan. 21, 1966	1130	33	16.2
July 20, 1961	1155	80	4.80	Feb. 8, 1966	1425	34	13.7
Aug. 10, 1961	1540	74	133	Feb. 23, 1966	1215	33	11.3
Aug. 31, 1961	1055	81	3.03	Mar. 8, 1966	1000	38	12.4
Sept. 6, 1961	1115	69	13.4	Mar. 24, 1966	1100	36	36.4
Sept. 19, 1961	0955	64	48.9	Apr. 26, 1966	1500	62	83.3
Oct. 25, 1961	1420	54	24.9	May 25, 1966	1305	66	16.6
Nov. 9, 1961	1035	43	97.0	June 20, 1966	1400	72	24.0
Dec. 7, 1961	0950	40	48.1	July 21, 1966	1215	75	2.73
Apr. 3, 1962	1330	46	63.0	Aug. 4, 1966	1250	74	.56
Apr. 19, 1962	1245	61	35.1	Aug. 18, 1966	1320	74	3.78
May 8, 1962	1100	72	19.1	Aug. 29, 1966	1230	78	1.40
May 22, 1962	1315	76	44.9	Sept. 15, 1966	1210	64	.22
June 21, 1962	0845	74	8.53	Oct. 1, 1966	0945	61	.15
Aug. 2, 1962	0955	76	2.02	Oct. 24, 1966	1310	49	.23
Aug. 21, 1962	1010	82	.28	Nov. 30, 1966	1600	40	.68
Sept. 5, 1962	1005	66	.44	Dec. 14, 1966	1125	38	.71
Oct. 29, 1962	1245	52	4.76	Jan. 12, 1967	1640	32	.65
Nov. 14, 1962	1125	47	3.28	Jan. 24, 1967	1510	44	2.30
Nov. 30, 1962	1110	44	5.04	Feb. 13, 1967	1525	35	15.6
Dec. 13, 1962	1425	34	4.08	Feb. 23, 1967	1605	33	6.77
Jan. 8, 1963	1035	34	9.15	Mar. 22, 1967	1620	49	5.03
Feb. 7, 1963	1300	34	32.5	Apr. 11, 1967	1455	43	57.4
Feb. 28, 1963	1325	33	7.96	Apr. 14, 1967	1300	59	2,750
Mar. 19, 1963	1355	46	22.8	Apr. 20, 1967	1630	61	67.9
Apr. 25, 1963	1600	62	3.87	May 4, 1967	1200	50	22.2
May 7, 1963	1500	68	54.2	May 16, 1967	1600	58	36.2
May 22, 1963	1535	61	49.8	June 15, 1967	1340	74	319
June 6, 1963	1310	81	22.2	July 6, 1967	1610	68	43.9
June 20, 1963	1440	74	7.30	July 27, 1967	1145	78	42.9

CROOKED RIVER BASIN

Temperature and Discharge of Crooked River near Richmond, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 11, 1967	1525	72	3.05				
Aug. 24, 1967	1115	70	1.40				
Sept. 12, 1967	1040	66	.42				
Oct. 27, 1967	1315	50	400				
Nov. 15, 1967	1345	45	38.6				
Dec. 7, 1967	1205	42	30.2				
Jan. 8, 1968	1510	33	18.8				
Feb. 29, 1968	1250	34	22.4				
Mar. 15, 1968	1035	45	19.0				
Apr. 11, 1968	1230	59	32.1				
May 6, 1968	1445	61	38.2				
June 6, 1968	1500	75	31.6				
July 15, 1968	1730	74	49.7				
Aug. 6, 1968	1135	81	11.1				
Aug. 14, 1968	1620	72	9.40				
Sept. 5, 1968	1210	52	1.04				
Sept. 19, 1968	1250	59	.82				
Oct. 24, 1968	1410	52	3.86				
Nov. 13, 1968	1530	40	6.84				
Nov. 27, 1968	1200	43	9.20				
Jan. 3, 1969	1605	32	19.2				
Feb. 14, 1969	1500	33	75.6				
Apr. 2, 1969	1140	43	52.4				
May 6, 1969	1815	68	380				
May 22, 1969	1305	56	2,280				
June 20, 1969	1450	71	34.4				
June 23, 1969	1800	70	680				
June 26, 1969	1330	75	2,180				
July 15, 1969	1040	82	56.5				
July 31, 1969	1625	77	12.8				
Sept. 8, 1969	1055	76	303				
Sept. 26, 1969	1125	59	17.9				

MISSOURI RIVER MAIN STEM

6-8955. Missouri River at Waverly, Mo.

Location.--Lat 39°12'51", long 93°30'57", in sec.14, T.51 N., R.24 W., on downstream side of second pier from right bank of bridge on U. S. Highway 65 at Waverly. River mile, 293.4.

Drainage area.--491,200 sq mi, approximately.

Discharge records available.--October 1928 to September 1969. Gage-height records collected at same site 1878-79, 1883-99 are contained in reports of Missouri River Commission; since 1915 in reports of U. S. Weather Bureau.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 5, 1949	1045	70	56,400	June 10, 1966	0820	60	58,600
May 20, 1949	1125	69	55,200	June 15, 1966	1000	66	84,300
May 25, 1949	1120	68	95,700	June 20, 1966	1000	70	39,500
June 10, 1949	1200	73	75,000	June 29, 1966	1115	78	39,600
June 20, 1949	1230	78	82,600	June 30, 1966	0745	75	59,500
June 29, 1949	1245	80	153,000	July 5, 1966	1645	87	38,500
July 5, 1949	1425	84	76,200	July 8, 1966	0740	82	44,200
July 11, 1949	1250	81	81,700	July 14, 1966	0730	82	38,400
July 20, 1949	1240	82	46,700	July 19, 1966	1145	80	40,200
July 30, 1949	0920	79	47,600	July 27, 1966	1305	81	40,300
Aug. 3, 1949	1130	80	41,500	Aug. 1, 1966	1010	78	39,800
Aug. 8, 1949	1050	81	35,700	Aug. 4, 1966	0830	72	40,800
Aug. 12, 1949	1235	81	36,900	Aug. 11, 1966	0900	75	43,200
Sept. 8, 1949	1050	69	52,800	Aug. 16, 1966	1530	76	75,600
Sept. 14, 1949	0905	65	130,000	Aug. 17, 1966	1320	76	69,900
Sept. 23, 1949	1225	65	39,000	Aug. 30, 1966	1230	80	38,200
Sept. 28, 1949	1245	63	35,900	Sept. 8, 1966	0925	64	42,300
Oct. 29, 1949	0710	51	37,200	Sept. 13, 1966	1335	74	38,700
Nov. 8, 1949	1210	48	37,400	Sept. 19, 1966	1220	64	42,300
Nov. 25, 1949	1235	41	26,800	Sept. 22, 1966	1010	69	38,300
Dec. 5, 1949	1220	41	25,100	Sept. 26, 1966	1005	56	38,200
Dec. 13, 1949	1250	37	24,400	Oct. 3, 1966	1200	70	37,200
May 23, 1963	0800	63	48,900	Oct. 6, 1966	0730	60	38,000
May 28, 1963	0820	62	53,500	Oct. 10, 1966	1100	64	35,700
June 11, 1963	0800	77	40,900	Oct. 19, 1966	0945	48	45,100
July 18, 1963	0715	81	41,800	Oct. 27, 1966	0840	63	37,600
Aug. 8, 1963	0700	82	34,700	Oct. 31, 1966	1040	55	38,100
Aug. 5, 1963	1030	82	36,000	Nov. 9, 1966	1355	46	37,800
July 30, 1963	0740	80	36,800	Nov. 15, 1966	1150	46	39,600
Aug. 15, 1963	1400	81	39,800	Nov. 17, 1966	1205	46	37,900
Aug. 20, 1963	1015	79	39,600	Nov. 22, 1966	0930	49	40,400
Sept. 6, 1963	0915	76	38,900	Nov. 29, 1966	0945	40	36,400
Oct. 3, 1963	1000	68	37,500	Dec. 9, 1966	1415	38	18,900
Nov. 14, 1963	1040	48	36,100	Dec. 21, 1966	1400	38	21,000
Dec. 4, 1963	1025	41	19,800	Jun. 10, 1967	1700	37	13,200
Sept. 15, 1964	0735	71	39,000	Jan. 13, 1967	1135	38	9,870
Nov. 12, 1964	0955	56	35,900	Jan. 16, 1967	1140	37	13,500
Nov. 17, 1964	1000	54	60,900	Jan. 24, 1967	1445	44	15,600
Dec. 1, 1964	1035	34	27,100	Jan. 31, 1967	1125	34	18,600
Apr. 20, 1965	0940	55	48,200	Feb. 6, 1967	1510	32	20,400
Apr. 27, 1965	0820	57	48,100	Mar. 3, 1967	0740	43	14,100
May 4, 1965	0725	65	40,100	Mar. 13, 1967	1600	42	17,500
May 11, 1965	0745	68	41,300	Mar. 20, 1967	1130	48	17,800
May 13, 1965	1130	69	53,100	Mar. 23, 1967	1020	45	34,500
May 20, 1965	0930	69	49,000	Mar. 28, 1967	1030	48	41,900
May 25, 1965	0800	70	72,400	Apr. 4, 1967	0935	49	58,800
June 10, 1965	1025	70	81,100	Apr. 7, 1967	0740	46	38,500
June 22, 1965	0745	71	55,500	Apr. 11, 1967	0715	43	39,500
June 24, 1965	0820	76	50,500	Apr. 18, 1967	0930	42	42,800
July 15, 1965	0745	81	69,800	Apr. 21, 1967	0950	44	39,100
July 23, 1965	0730	80	162,000	Apr. 26, 1967	0825	52	43,000
Aug. 10, 1965	0720	80	44,700	May 1, 1967	0940	58	36,400
Aug. 17, 1965	1140	76	41,600	May 10, 1967	1210	58	40,700
Sept. 3, 1965	0730	72	49,500	May 16, 1967	1230	55	39,700
Sept. 14, 1965	0930	70	53,000	May 19, 1967	1310	60	37,500
Jan. 6, 1966	1000	34	37,300	May 31, 1967	1050	52	56,400
Jan. 18, 1966	1200	34	29,100	June 13, 1967	1700	70	243,000
Mar. 16, 1966	1400	47	34,000	June 15, 1967	0750	71	217,000
Mar. 23, 1966	0850	47	40,700	June 19, 1967	1530	72	184,000
Apr. 8, 1966	0955	46	43,900	June 22, 1967	0930	73	237,000
Apr. 13, 1966	1100	41	42,300	June 25, 1967	1040	70	215,000
Apr. 18, 1966	1100	53	41,200	June 28, 1967	0750	69	158,000
Apr. 21, 1966	0900	50	45,800	July 3, 1967	1030	74	97,200
May 2, 1966	1135	56	42,900	July 12, 1967	1055	73	61,100
May 16, 1966	1000	52	43,300	July 18, 1967	1130	73	51,300
May 20, 1966	1100	52	42,900	July 25, 1967	1115	80	51,300
May 31, 1966	1330	64	39,200	July 31, 1967	1000	79	56,400
June 7, 1966	0730	61	39,800	Aug. 8, 1967	1045	76	50,700

MISSOURI RIVER MAIN STEM

Temperature and Discharge of Missouri River at Waverly, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 17, 1967	1235	76	42,200
Aug. 22, 1967	1005	75	42,600
Aug. 31, 1967	1000	72	41,000
Sept. 6, 1967	1420	72	42,700
Sept. 13, 1967	0955	70	41,000
Sept. 21, 1967	0920	68	54,000
Sept. 28, 1967	0900	66	52,200
Oct. 2, 1967	1410	72	44,500
Oct. 11, 1967	1150	56	70,500
Oct. 16, 1967	1735	56	75,200
Oct. 23, 1967	1430	57	44,500
Oct. 30, 1967	1645	49	60,700
Nov. 1, 1967	1405	47	60,700
Nov. 6, 1967	1300	43	49,100
Nov. 13, 1967	1030	45	43,000
Nov. 21, 1967	1250	43	42,000
Nov. 28, 1967	1040	43	41,000
Dec. 4, 1967	1200	36	29,600
Dec. 11, 1967	1125	37	30,700
Jan. 10, 1968	1330	32	14,100
Jan. 30, 1968	1030	37	36,600
Feb. 20, 1968	1500	32	28,200
Feb. 28, 1968	1250	34	27,100
Mar. 6, 1968	1400	38	34,000
Mar. 13, 1968	1335	41	27,600
Mar. 18, 1968	1330	48	25,700
Mar. 26, 1968	1315	47	39,500
Apr. 5, 1968	1520	58	41,600
Apr. 9, 1968	1350	52	40,600
Apr. 16, 1968	1350	66	43,800
Apr. 23, 1968	1100	54	62,100
Apr. 26, 1968	1320	64	58,800
May 1, 1968	0750	57	43,800
May 7, 1968	1220	60	41,700
May 14, 1968	1235	64	41,500
May 21, 1968	1300	60	42,000
May 28, 1968	0730	62	46,400
June 3, 1968	0830	61	47,100
June 6, 1968	0930	60	39,600
June 12, 1968	0805	78	43,600
June 24, 1968	1415	80	42,300
July 2, 1968	1245	74	44,800
July 8, 1968	1345	77	40,200
July 11, 1968	0935	78	39,600
July 16, 1968	1230	80	42,700
July 31, 1968	1245	78	47,700
Aug. 5, 1968	0945	78	79,400
Aug. 12, 1968	1515	74	119,000
Aug. 15, 1968	1000	78	54,900
Aug. 22, 1968	1430	83	48,000
Aug. 26, 1968	1540	81	46,700
Aug. 29, 1968	1310	78	42,000
Sept. 4, 1968	0810	72	41,800
Sept. 10, 1968	1200	68	40,000
Sept. 17, 1968	1340	70	37,800
Sept. 20, 1968	1115	68	44,100
Sept. 26, 1968	1130	70	42,700
Sept. 30, 1968	0920	70	39,000
Oct. 11, 1968	1020	62	53,300
Oct. 15, 1968	0825	67	40,600
Oct. 18, 1968	0835	62	85,900
Oct. 22, 1968	1050	57	69,900
Oct. 28, 1968	1040	52	50,900
Nov. 4, 1968	1030	53	41,800
Nov. 12, 1968	0950	44	49,400
Nov. 20, 1968	0845	46	49,200
Nov. 25, 1968	1020	42	46,800
Nov. 29, 1968	0935	40	49,200
Dec. 3, 1968	1010	38	45,900
Dec. 11, 1968	1100	38	32,200
Dec. 19, 1968	1010	34	15,900
Jan. 8, 1969	0940	32	19,400
Jan. 30, 1969	1145	34	22,700
Feb. 3, 1969	0955	34	27,100
Feb. 13, 1969	1045	34	42,000
Feb. 20, 1969	1000	35	32,700
Feb. 26, 1969	1005	36	49,000
Mar. 5, 1969	1015	37	73,800
Mar. 14, 1969	0810	35	42,500
Mar. 20, 1969	0955	34	90,300
Mar. 26, 1969	1020	38	121,000
Apr. 1, 1969	1100	44	81,600
Apr. 4, 1969	0935	43	78,900
Apr. 8, 1969	1000	47	116,000
Apr. 15, 1969	0835	53	113,000
Apr. 21, 1969	1140	56	106,000
Apr. 29, 1969	1020	55	161,000
May 6, 1969	1020	66	78,900
May 14, 1969	1105	62	76,000
May 20, 1969	1030	65	71,700
May 27, 1969	1100	67	93,700
June 3, 1969	0830	66	73,200
June 13, 1969	1205	71	67,100
June 17, 1969	0820	67	63,400
June 20, 1969	0950	69	63,500
June 23, 1969	0955	70	123,000
July 1, 1969	1000	75	120,000
July 8, 1969	1005	79	111,000
July 15, 1969	1350	80	82,300
July 23, 1969	0755	82	77,400
July 29, 1969	0810	82	74,800
Aug. 4, 1969	1330	82	68,200
Aug. 11, 1969	1050	81	63,800
Aug. 19, 1969	1040	82	63,500
Aug. 27, 1969	1010	81	63,300
Sept. 2, 1969	1000	80	63,600
Sept. 5, 1969	0850	78	68,300
Sept. 8, 1969	1320	78	84,500
Sept. 17, 1969	1050	73	71,000
Sept. 24, 1969	0945	70	63,000

WAKENDA CREEK BASIN

6-8960. Wakenda Creek at Carrollton, Mo.

Location.—Lat 39°20'50", long 93°29'45", in NE¼SE¼ sec.5, T.52 N., R.23 W., on left bank near upstream side of bridge on U. S. Highway 65 in Carrollton, half a mile downstream from Brush Creek, and 14 miles upstream from mouth.

Drainage area.—248 sq mi.

Discharge records available.—March 1948 to September 1969.

Maximum temperature measured.—93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 29, 1950	1500	33	39.1
Feb. 25, 1952	1330	36	39.7
Aug. 7, 1952	1320	81	3.65
Nov. 18, 1952	1300	51	10.6
Mar. 19, 1963	1205	44	10.4
June 4, 1963	1220	83	6.55
July 1, 1963	0815	81	2.06
July 18, 1963	1045	89	2.13
Aug. 5, 1963	1530	93	1.95
Sept. 4, 1963	1410	80	1.24
Oct. 17, 1963	1140	67	1.24
Nov. 21, 1963	1045	51	1.65
Jan. 3, 1964	0930	33	1.94
Feb. 4, 1964	1240	44	2.75
Mar. 11, 1964	0745	41	7.54
Apr. 14, 1964	0835	60	24.4
June 2, 1964	1200	70	14.0
June 17, 1964	1410	81	25.0
July 7, 1964	0600	78	22.2
July 23, 1964	0600	79	5.51
Aug. 25, 1964	1520	77	3.01
Sept. 15, 1964	1140	72	2.82
Sept. 25, 1964	1000	62	3.34
Oct. 12, 1964	1235	55	1.67
Nov. 5, 1964	0645	56	1.76
Dec. 15, 1964	0720	33	14.0
Jan. 7, 1965	0735	43	78.3
Jan. 27, 1965	0925	33	60.9
Feb. 11, 1965	0735	36	162
Mar. 24, 1965	1025	35	33.2
Apr. 20, 1965	0750	58	41.3
May 4, 1965	1050	70	22.1
June 15, 1965	1810	67	14.1
July 8, 1965	0630	71	4.55
July 28, 1965	1315	80	29.9
Aug. 10, 1965	1045	74	13.6
Aug. 26, 1965	0745	73	8.73
Sept. 14, 1965	0745	68	10.6
Sept. 30, 1965	1500	63	41.6
Oct. 14, 1965	0745	54	14.0
Nov. 4, 1965	0655	52	19.3
Nov. 17, 1965	0730	43	17.4
Dec. 2, 1965	0820	40	13.0
Jan. 6, 1966	0845	34	31.2
Jan. 20, 1966	1515	33	10.0
Feb. 3, 1966	1315	34	5.07
Mar. 24, 1966	1300	37	25.4
Apr. 6, 1966	0645	38	11.6
May 10, 1966	1520	45	11.0
June 17, 1966	1650	72	257
July 19, 1966	1600	84	7.36
Aug. 1, 1966	1420	78	6.25
Aug. 22, 1966	1105	64	4.83
Sept. 8, 1966	0710	64	3.44
Oct. 19, 1966	1330	54	4.07
Oct. 31, 1966	1540	56	3.34
Nov. 29, 1966	0745	38	2.57
Jan. 3, 1967	1200	34	3.28
Jan. 24, 1967	1625	48	15.3
Feb. 6, 1967	1715	32	54.3
Feb. 28, 1967	0955	38	6.65
Mar. 23, 1967	0905	51	9.07
Apr. 11, 1967	1235	42	33.2
Apr. 14, 1967	1620	69	2,530
May 1, 1967	1350	57	35.3
May 16, 1967	1500	63	34.0
June 9, 1967	1215	66	58.3
June 15, 1967	1750	71	193
July 3, 1967	1425	70	46.5
July 18, 1967	1345	76	9.74
Aug. 9, 1967	1325	79	7.03
Aug. 17, 1967	0815	70	3.74
Sept. 6, 1967	1625	76	3.59
Sept. 28, 1967	1425	56	53.6
Oct. 31, 1967	1000	47	4,650
Nov. 6, 1967	1620	39	163
Nov. 21, 1967	0820	43	42.2
Jan. 10, 1968	1435	35	25.5
Jan. 26, 1968	1050	33	86.2
Mar. 6, 1968	1640	47	33.8
Mar. 18, 1968	1530	56	23.0
Apr. 9, 1968	1630	62	21.3
May 6, 1968	1720	84	28.6
June 2, 1968	1410	75	82.2
July 2, 1968	0825	63	7.09
Aug. 5, 1968	1500	85	11.0
Sept. 4, 1968	1310	68	3.24
Sept. 17, 1968	0855	63	4.11
Sept. 30, 1968	1420	68	3.55
Oct. 15, 1968	1605	72	13.3
Nov. 20, 1968	1715	36	40.6
Dec. 3, 1968	0900	41	63.4
Dec. 23, 1968	1350	32	41.0
Jan. 3, 1969	1245	32	22.3
Feb. 3, 1969	1235	33	74.4
Feb. 20, 1969	1410	37	53.4
Mar. 5, 1969	0850	36	69.7
Apr. 8, 1969	1620	59	128
Apr. 21, 1969	1645	63	161
May 14, 1969	0850	62	125
May 22, 1969	1645	57	1,600
June 10, 1969	1245	69	22.4
June 23, 1969	1600	71	2,260
July 1, 1969	1755	72	3,750
Aug. 19, 1969	0915	76	50.1
Sept. 2, 1969	1630	72	11.0

GRAND RIVER BASIN

6-8961.6 Grand River near Grant City, Mo.

Location.--W½ sec.21, T.66 N., R.32 W., at bridge on State Highway 46, 6 miles northwest of Grant City, Worth County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 17, 1962	1405	85	17.3				
Sept. 14, 1962	1310	82	6.87				
June 12, 1963	1325	90	12.3				
Oct. 2, 1963	1415	80	5.60				
Oct. 29, 1963	1155	52	5.39				
Nov. 19, 1963	1345	49	4.93				
Aug. 20, 1964	1230	75	8.40				
Oct. 20, 1964	1030	44	16.5				
July 19, 1966	0830	75	37.4				
Sept. 1, 1967	1440	72	4.02				
May 21, 1968	0900	56	9.70				
Oct. 2, 1968	1715	71	2.13				
Mar. 19, 1969	1425	53	65.6				
June 10, 1969	0940	64	20.6				
Sept. 9, 1969	0945	64	56.2				

GRAND RIVER BASIN

6-8961.7 Grand River near Stanberry, Mo.

Location.--SE¼ sec.22, T.63 N., R.32 W., at bridge on U. S. Highways 136 and 169, 2-3/4 miles northeast of Stanberry, Gentry County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 27, 1945	0845	58	16.4				
Nov. 3, 1946	1220	49	30.6				
May 17, 1962	1220	84	27.4				
Sept. 17, 1962	1455	78	10.9				
June 12, 1963	1055	81	20.7				
Aug. 28, 1963	1450	90	9.72				
Oct. 2, 1963	1225	74	9.25				
Oct. 29, 1963	1405	54	8.40				
Aug. 20, 1964	1045	73	16.7				
Oct. 12, 1964	1225	59	31.6				
Oct. 20, 1964	1200	52	21.9				
Sept. 2, 1965	1240	76	31.8				
Sept. 16, 1966	0855	59	22.3				
Sept. 1, 1967	1320	72	7.45				
Sept. 26, 1968	1055	65	4.45				
Oct. 3, 1968	0820	53	2.58				

GRAND RIVER BASIN

6-8961.85 Middle Fork Grand River at Grant City, Mo.

Location.--NE¼ sec.34, T.66 N., R.31 W., at bridge on State Highway 46, 1 mile east of Grant City, Worth County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--94° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 17, 1962	1505	86	2.22				
Sept. 14, 1962	1415	84	.77				
June 12, 1963	1425	94	.60				
Aug. 28, 1963	0815	77	.60				
Oct. 2, 1963	1520	72	.44				
Oct. 29, 1963	1255	51	2.93				
Nov. 19, 1963	1430	49	1.59				
Aug. 20, 1964	1145	73	.76				
Oct. 20, 1964	0930	42	1.82				
Sept. 1, 1967	1540	78	.24				
Oct. 8, 1968	1745	57	19.9				

GRAND RIVER BASIN

6-8965. Thompson Branch near Albany, Mo.

Location.--Lat 40°12'50", long 94°19'55", in SE¼SE¼ sec.36, T.63 N., R.31 W., at bridge on State Highway 85, 1.8 miles upstream from East Fork Grand River and 2 miles south of Albany.

Drainage area.--5.58 sq mi.

Discharge records available.--August 1955 to September 1959 (discontinued). Discharge measurements and daily gage-height record available to September 1969.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 13, 1961	0900	33	0.63				
Feb. 21, 1961	1240	37	1.11				
May 2, 1961	1045	59	.83				
May 5, 1961	1520	53	56.3				
June 12, 1961	0830	77	.25				
June 26, 1961	1030	78	.07				
Aug. 10, 1961	1405	87	.08				
Dec. 4, 1961	0850	48	1.59				
Mar. 9, 1962	1315	35	4.53				
May 4, 1962	0830	64	.27				
May 17, 1962	0900	74	.10				
June 19, 1962	1440	90	.01				
July 20, 1962	1300	87	.10				
Mar. 29, 1963	1450	64	.16				
Apr. 15, 1963	1330	58	.06				
May 15, 1963	0945	62	25.2				
June 12, 1963	0745	74	0				
Mar. 20, 1964	1305	37	.06				
Apr. 30, 1964	1455	72	.40				
May 14, 1964	1550	78	.05				
June 18, 1964	0755	76	.27				
July 1, 1964	1455	80	.09				
Sept. 18, 1964	1010	68	.52				
Oct. 12, 1964	1600	61	.02				
Oct. 29, 1964	0830	47	0				
Nov. 18, 1964	1540	46	.34				
Dec. 15, 1964	1535	33	.55				
Jan. 8, 1965	1230	36	1.69				
Feb. 16, 1965	1340	33	1.23				
Apr. 6, 1965	1605	62	6.26				
May 6, 1965	1325	78	.65				
July 14, 1965	1410	89	.10				
July 30, 1965	1135	84	.05				
Sept. 15, 1965	1110	72	.06				
Oct. 13, 1965	1000	51	.37				
Nov. 9, 1965	1315	44	.25				
Dec. 8, 1965	1350	36	.24				
Dec. 21, 1965	1250	39	.24				
Mar. 14, 1966	1315	53	.62				
June 8, 1966	1300	68	.20				
Oct. 13, 1966	0930	61	.82				
Apr. 6, 1967	1520	73	.13				
Apr. 19, 1967	1150	65	.33				
May 11, 1967	0900	57	.56				
May 23, 1967	1440	80	.06				
June 9, 1967	1000	65	2.43				
June 22, 1967	0855	68	2.88				
July 14, 1967	1105	75	.10				
Oct. 6, 1967	0900	59	.04				
Oct. 20, 1967	1130	48	.03				
Nov. 15, 1967	1030	47	.13				
Dec. 19, 1967	1330	35	1.07				
Mar. 21, 1968	1405	52	.06				
May 29, 1968	1010	62	.15				
July 18, 1968	0835	74	.09				
Oct. 10, 1968	1435	56	.91				
Oct. 31, 1968	0900	52	.03				
Nov. 26, 1968	1355	40	.10				
May 2, 1969	0900	63	1.28				
May 28, 1969	1135	74	.58				

GRAND RIVER BASIN

6-8965.5 Grand River near Darlington, Mo.

Location.--N½ sec.11, T.62 N., R.31 W., at bridge on county highway 1/8 mile below Wabash Railroad bridge, 1½ miles west of Evona and 2 miles east of Darlington, Gentry County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 17, 1962	0950	74	79.5				
June 19, 1962	1510	90	94.0				
Sept. 17, 1962	1300	72	22.7				
June 12, 1963	0830	73	41.2				
Aug. 28, 1963	1550	91	21.6				
Oct. 2, 1963	0815	62	17.4				
Oct. 29, 1963	1550	54	19.8				
Aug. 20, 1964	0745	72	25.4				
Oct. 20, 1964	1450	55	51.7				
Sept. 1, 1967	1030	63	15.2				

GRAND RIVER BASIN

6-8969. Grand River near Pattonsburg, Mo.

Location.--SW¼ sec.11, T.60 N., R 29 W., at bridge on U. S. Highway 69, 1 mile upstream from Big Creek and 1½ miles south of Plattonsburg, Daviess County.

Drainage area.--1,680 sq mi (from C of E).

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 3, 1962	1415	74	260				
May 18, 1962	0815	76	110				
Sept. 21, 1962	1235	67	27.6				
Aug. 27, 1963	1405	87	27.8				
Sept. 24, 1963	1505	76	50.4				
Oct. 11, 1963	1420	77	19.7				
Oct. 30, 1963	1050	55	27.5				
Aug. 19, 1964	1645	85	39.6				
Oct. 20, 1964	1640	57	69.5				
Sept. 2, 1965	0910	67	264				
Sept. 9, 1966	1400	77	44.5				
Sept. 1, 1967	0905	59	25.8				
Sept. 25, 1968	1315	67	24.8				

GRAND RIVER BASIN

6-8970. East Fork Big Creek near Bethany, Mo.

Location.--Lat 40°17'50"', long 94°01'55" in SE¼ sec.34, T.64 N., R.28 W., on right bank 50 ft downstream from bridge on old. U. S. Highway 69, 2 miles north of Bethany, and 4 miles upstream from confluence with West Fork.

Drainage area.--95 sq mi, approximately.

Discharge records available.--March 1934 to September 1969.

Maximum temperature.--95° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 16, 1946	0755	59	27.9	May 21, 1962	1255	80	3.01
May 18, 1946	0840	58	183	June 5, 1962	1500	75	7.03
July 19, 1946	1005	83	5.21	June 19, 1962	1115	77	8.32
Aug. 29, 1946	1700	65	5.24	July 9, 1962	1110	78	1.24
Sept. 24, 1946	1345	78	9.26	July 23, 1962	1350	79	93.1
Nov. 2, 1946	0830	49	1.41	Aug. 1, 1962	1530	77	1.34
Dec. 4, 1946	1400	37	1.75	Aug. 20, 1962	0830	74	.06
Dec. 18, 1946	1400	34	2.64	Sept. 4, 1962	1505	65	50.9
Jan. 7, 1947	0750	32	1.16	Sept. 17, 1962	1050	70	1.33
Jan. 25, 1947	0915	34	8.18	Oct. 1, 1962	1115	59	13.7
Mar. 28, 1947	0840	40	52.4	Oct. 15, 1962	1115	69	2.68
Apr. 16, 1947	1235	53	45.9	Nov. 14, 1962	1210	44	2.82
Apr. 28, 1947	1220	66	22.3	Dec. 5, 1962	1500	41	5.72
May 12, 1947	1445	67	6.76	Dec. 19, 1962	1400	35	3.95
May 25, 1947	0950	57	23.4	Apr. 15, 1963	1525	58	7.83
June 26, 1947	1630	81	52.9	May 10, 1963	1505	79	8.44
July 7, 1947	1325	79	12.6	May 29, 1963	1345	68	17.0
July 28, 1947	1410	87	1.18	June 12, 1963	1600	83	1.11
Aug. 30, 1947	1345	88	.26	June 21, 1963	1315	74	1.00
Sept. 18, 1947	1645	85	.26	July 5, 1963	1100	82	.39
Nov. 22, 1947	0930	37	2.64	July 22, 1963	1135	80	.90
Jan. 6, 1948	1205	33	1.73	Aug. 2, 1963	0830	78	.12
Jan. 21, 1948	0810	32	1.18	Aug. 19, 1963	1305	62	2.04
Mar. 11, 1948	1210	31	8.47	Sept. 10, 1963	1515	74	.86
Apr. 7, 1948	1813	68	16.4	Oct. 28, 1963	1530	56	.10
Apr. 26, 1948	1055	65	22.2	Nov. 20, 1963	1315	51	.06
May 11, 1948	1125	58	10.8	Dec. 4, 1963	1155	42	.28
May 23, 1948	1000	72	2.07	Apr. 7, 1964	1600	45	17.0
June 10, 1948	1210	73	.31	Apr. 29, 1964	1545	61	41.5
July 12, 1948	1000	79	.43	May 12, 1964	0805	63	4.07
July 28, 1948	1550	89	.36	May 20, 1964	1540	33	1.93
Nov. 14, 1948	1125	40	.06	June 3, 1964	1610	68	1.32
Dec, 21, 1948	1530	35	.52	June 29, 1964	1555	83	12.1
Feb. 9, 1949	1355	32	1.14	July 16, 1964	1045	77	4.98
Mar. 11, 1949	0910	32	34.7	July 22, 1964	0655	83	2.13
May 3, 1949	0845	66	5.22	Aug. 11, 1964	1405	78	.36
June 6, 1949	1145	76	5.57	Sept. 18, 1964	1150	68	36.8
July 8, 1949	1830	84	.47	Oct. 13, 1964	1445	59	1.22
Dec. 6, 1949	0900	34	.40	Nov. 4, 1964	1500	58	.99
Jan. 5, 1950	1130	30	8.35	Nov. 20, 1964	1210	39	4.89
Jan. 28, 1950	1145	32	.59	Dec. 16, 1964	1300	33	10.9
Feb. 18, 1950	1055	32	12.7	Jan. 12, 1965	1620	34	8.42
Mar. 17, 1950	1230	38	4.20	Apr. 7, 1965	1510	53	142
June 7, 1950	1215	80	6.37	Apr. 28, 1965	1315	52	51.0
Aug. 21, 1950	1555	71	2.37	May 6, 1965	1120	70	23.1
Oct. 6, 1950	1600	64	.63	May 19, 1965	1510	66	12.2
Dec. 14, 1950	1635	32	.37	June 4, 1965	1455	73	20.8
Jan. 9, 1951	1600	32	.08	June 23, 1965	0855	74	1.21
Jan. 30, 1951	1535	32	.08	July 14, 1965	1540	82	2.25
Oct. 16, 1951	1130	69	3.30	July 30, 1965	1355	79	.45
Dec. 12, 1951	1115	34	11.4	Aug. 20, 1965	0830	71	1.62
Dec. 12, 1952	1250	34	.78	Sept. 15, 1965	1530	67	3.62
Jan. 15, 1953	1305	34	1.00	Oct. 8, 1965	1100	57	7.35
Mar. 10, 1961	0945	34	89.7	Oct. 20, 1965	1245	59	4.43
Apr. 26, 1961	1500	60	34.2	Nov. 4, 1965	1445	54	2.21
May 17, 1961	1500	58	42.8	Dec. 3, 1965	1345	40	3.28
June 12, 1961	1630	86	3.87	Feb. 18, 1966	1235	35	16.5
June 26, 1961	0815	68	2.56	Mar. 14, 1966	1520	55	14.3
July 5, 1961	1520	87	.75	Mar. 25, 1966	1440	51	12.6
July 26, 1961	1505	78	60.4	Apr. 8, 1966	1505	54	3.45
Aug. 10, 1961	0810	82	4.12	May 6, 1966	1420	78	2.81
Aug. 23, 1961	1600	72	2.99	June 8, 1966	0945	66	2.97
Sept. 26, 1961	1500	58	58.7	June 22, 1966	1000	75	6.88
Dec. 4, 1961	1110	48	23.0	July 8, 1966	1305	91	2.64
Jan. 10, 1962	1255	33	40.8	July 28, 1966	1455	92	3.59
Mar. 4, 1962	1440	38	21.7	Aug. 10, 1966	1220	72	12.6
May 4, 1962	1550	68	5.77	Aug. 26, 1966	1500	79	.66

Temperature and Discharge of East Fork Big Creek near Bethany, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 13, 1966	1530	69	1.10				
Nov. 18, 1966	1350	46	.11				
Dec. 15, 1966	1440	33	.18				
Feb. 17, 1967	0945	33	2.38				
Mar. 16, 1967	1545	52	.84				
Apr. 6, 1967	1115	66	18.1				
Apr. 19, 1967	1535	66	16.1				
May 17, 1967	1345	71	6.73				
June 23, 1967	1150	75	39.1				
July 14, 1967	1400	78	4.35				
July 20, 1967	1555	92	1.41				
Aug. 10, 1967	1200	78	.63				
Oct. 5, 1967	1450	61	107				
Oct. 27, 1967	1040	43	18.3				
Nov. 15, 1967	0900	36	2.38				
Dec. 8, 1967	1340	39	1.44				
Feb. 6, 1968	0900	34	10.4				
Feb. 27, 1968	1115	34	1.71				
Mar. 21, 1968	1055	43	3.87				
May 10, 1968	1515	69	6.65				
May 29, 1968	1145	65	2.85				
June 26, 1968	1110	64	.69				
July 12, 1968	1430	95	.44				
Oct. 10, 1968	1205	53	16.9				
Oct. 31, 1968	1130	67	.02				
Nov. 25, 1968	1345	39	.88				
May 1, 1969	1140	59	42.5				
July 24, 1969	1510	81	7.07				
Sept. 15, 1969	1430	67	5.16				

GRAND RIVER BASIN

6-8975. Grand River near Gallatin, Mo.

Location.--Lat 39°55'35", long 93°56'35", in SW¼NW¼ sec.16, T.59 N., R.27 W., on left bank upstream side of bridge on State Highway 6, 100 ft downstream from Chicago, Rock Island & Pacific Railroad Co. bridge, 1 mile northeast of Gallatin, and 6 miles upstream from Honey Creek, and at mile 90.

Drainage area.--2,250 sq mi, approximately.

Discharge records available.--June 1921 to September 1969.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 20, 1945	1500	68	48.4
May 18, 1946	1305	59	7,900
May 20, 1946	0835	61	1,580
May 21, 1946	0930	63	883
July 19, 1946	1340	87	234
Aug. 29, 1946	1210	67	57.2
Sept. 24, 1946	1030	70	101
Nov. 2, 1946	1345	52	43.6
Dec. 3, 1946	0730	35	48.1
Dec. 17, 1946	0810	33	64.9
Jan. 7, 1947	1125	33	18.1
Jan. 27, 1947	0850	37	88.0
Mar. 28, 1947	1255	44	565
Apr. 15, 1947	1000	53	1,260
Apr. 30, 1947	1555	68	1,050
May 13, 1947	1445	68	253
July 10, 1947	1615	79	409
July 31, 1947	1010	84	121
Aug. 29, 1947	0740	84	61.9
Sept. 20, 1947	0815	77	35.5
Nov. 2, 1947	0900	54	34.8
Nov. 29, 1947	1530	38	43.2
Dec. 9, 1947	0825	34	332
Dec. 17, 1947	1230	34	82.4
Dec. 30, 1947	0945	34	63.4
Jan. 7, 1948	1140	35	41.0
Jan. 30, 1948	0910	33	30.8
Apr. 9, 1948	1100	55	489
May 14, 1948	0845	60	422
June 11, 1948	0750	76	48.7
June 27, 1948	1035	76	453
Aug. 12, 1948	1200	88	387
Aug. 24, 1948	1715	72	40.0
Sept. 20, 1948	1325	79	18.3
Oct. 19, 1948	1035	53	16.7
Nov. 13, 1948	1350	43	22.9
Dec. 1, 1948	1030	36	19.6
Dec. 17, 1948	1200	35	23.2
Feb. 10, 1949	1400	30	50.6
Mar. 2, 1949	1250	32	1,570
May 2, 1949	0820	61	241
Aug. 2, 1949	0950	79	71.2
Sept. 7, 1949	1230	70	122
Nov. 8, 1949	0730	49	91.2
Dec. 7, 1949	0730	35	78.5
Jan. 3, 1950	1010	32	231
Jan. 28, 1950	1245	32	129
Feb. 17, 1950	0900	34	311
Mar. 16, 1950	0900	37	90.4
June 27, 1950	0835	66	297
Sept. 6, 1950	1130	72	111
Oct. 5, 1950	1705	56	144
Nov. 2, 1950	1630	57	47.3
Dec. 14, 1950	1345	33	38.6
Aug. 4, 1951	1155	82	190
Aug. 18, 1951	0940	76	471
Oct. 16, 1951	0900	62	200
Nov. 9, 1951	1505	39	320
Nov. 29, 1951	1145	39	660
Feb. 21, 1952	1220	37	486
July 10, 1952	1120	68	208
Aug. 19, 1952	1315	84	353
Sept. 20, 1952	0915	53	64.6
Oct. 16, 1952	1440	56	25.6
Nov. 21, 1952	1420	46	258
Dec. 12, 1952	1035	34	217
Jan. 15, 1953	1440	34	73.6
Dec. 6, 1954	0930	35	40.0
Feb. 6, 1961	0910	33	61.9
May 31, 1961	0645	70	256
June 13, 1961	0735	80	222
June 30, 1961	1245	83	196
July 13, 1961	0835	77	169
July 28, 1961	0900	82	455
Aug. 10, 1961	1010	80	181
Aug. 21, 1961	0855	72	230
Sept. 1, 1961	1015	79	71.2
Sept. 12, 1961	1350	75	242
Dec. 13, 1961	0830	33	321
May 18, 1962	1130	77	158
June 27, 1962	0840	80	185
July 5, 1962	0815	84	286
Aug. 24, 1962	1115	77	777
Sept. 12, 1962	0830	70	196
Sept. 26, 1962	0830	63	47.9
Oct. 10, 1962	1420	69	243
Oct. 26, 1962	0830	45	280
Nov. 7, 1962	0820	44	131
Nov. 26, 1962	0830	39	164
Dec. 10, 1962	0835	33	61.8
Apr. 10, 1963	1440	55	312
Apr. 25, 1963	0845	53	425
May 17, 1963	0820	62	8,770
May 23, 1963	0830	60	524
June 6, 1963	0850	80	192
June 19, 1963	0835	76	112
June 26, 1963	1200	83	67.0
July 3, 1963	0830	85	62.1
July 26, 1963	0815	82	76.5
Aug. 14, 1963	0900	73	248
Aug. 26, 1963	0815	77	48.1
Sept. 3, 1963	1055	78	66.8
Sept. 18, 1963	0815	72	67.1
Sept. 24, 1963	0830	65	74.0
Oct. 7, 1963	0835	67	31.2
Oct. 23, 1963	0825	68	97.8
Nov. 14, 1963	0850	41	28.4
Nov. 26, 1963	0840	40	111
Dec. 6, 1963	1300	47	40.5
Feb. 5, 1964	0840	32	36.1
Mar. 5, 1964	1240	39	55.9
Mar. 18, 1964	0845	44	67.8
Mar. 27, 1964	1210	39	89.4
May 21, 1964	0855	80	134
May 25, 1964	0905	81	252
June 3, 1964	0825	66	150
July 24, 1964	0845	88	208
Aug. 7, 1964	1315	86	82.4
Aug. 25, 1964	0815	73	99.7
Oct. 7, 1964	0850	56	135
Oct. 26, 1964	0850	54	84.5
Nov. 16, 1964	0840	56	1,050
Nov. 25, 1964	0905	38	144
Dec. 23, 1964	1050	33	122
Jan. 11, 1965	0945	33	226
Jan. 20, 1965	0905	33	176
May 5, 1965	0845	70	429
May 24, 1965	0850	74	340
June 25, 1965	0935	76	141
July 26, 1965	0825	80	411
Aug. 16, 1965	0905	81	95.0
Aug. 30, 1965	0835	73	80.4
Sept. 9, 1965	1400	80	737
Oct. 13, 1965	1235	58	273
Oct. 25, 1965	0800	50	387

GRAND RIVER BASIN

Temperature and Discharge of Grand River near Gallatin, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 3, 1965	0900	55	208				
Nov. 24, 1965	1015	47	213				
Dec. 7, 1965	1320	40	186				
Dec. 23, 1965	1210	42	169				
Jan. 27, 1966	0905	35	110				
Feb. 11, 1966	0835	34	1,720				
Feb. 25, 1966	0810	34	162				
Mar. 10, 1966	1305	44	280				
Mar. 23, 1966	1115	50	304				
Apr. 6, 1966	1020	44	150				
Apr. 27, 1966	0855	63	201				
May 10, 1966	1250	54	99.1				
May 27, 1966	0835	73	281				
June 24, 1966	1255	81	179				
July 8, 1966	0810	82	173				
July 25, 1966	0750	79	363				
Aug. 8, 1966	1100	77	745				
Aug. 23, 1966	1150	70	347				
Sept. 9, 1966	0950	73	54.4				
Sept. 26, 1966	0835	61	34.3				
Oct. 28, 1966	0940	57	43.8				
Nov. 23, 1966	0935	55	35.2				
Dec. 15, 1966	0850	35	28.4				
Jan. 31, 1967	1300	34	167				
Feb. 15, 1967	1145	33	198				
Feb. 23, 1967	1125	34	63.5				
Mar. 15, 1967	0920	41	86.8				
Mar. 29, 1967	0855	56	680				
Apr. 4, 1967	1345	64	934				
Apr. 26, 1967	1320	48	589				
May 10, 1967	1020	63	477				
May 26, 1967	1115	81	99.0				
July 13, 1967	1255	76	468				
July 25, 1967	1110	82	153				
Aug. 7, 1967	0845	76	97.9				
Aug. 24, 1967	1320	80	61.8				
Sept. 18, 1967	0850	69	54.9				
Sept. 27, 1967	0850	66	42.7				
Oct. 4, 1967	1310	72	35.2				
Nov. 3, 1967	0900	44	1,260				
Nov. 27, 1967	0925	36	93.4				
Dec. 22, 1967	0910	33	139				
Feb. 8, 1968	1400	35	200				
Mar. 19, 1968	1305	55	134				
Mar. 25, 1968	0950	48	87.4				
Apr. 5, 1968	1235	48	752				
Apr. 22, 1968	0935	57	1,500				
May 7, 1968	1020	60	296				
May 24, 1968	0850	57	228				
June 7, 1968	0925	79	96.7				
June 24, 1968	0915	76	56.5				
July 8, 1968	0900	78	45.5				
July 26, 1968	1005	79	228				
Aug. 16, 1968	1040	85	72.8				
Aug. 26, 1968	0915	78	43.8				
Sept. 23, 1968	0920	69	42.2				
Oct. 4, 1968	0925	60	17.2				
Oct. 22, 1968	0900	56	61.8				
Nov. 14, 1968	0905	39	51.4				
Nov. 22, 1968	0925	40	93.1				
Dec. 4, 1968	1240	35	65.3				
Mar. 17, 1969	0930	44	226				
Mar. 24, 1969	0920	44	462				
June 6, 1969	1015	78	270				
Aug. 25, 1969	0925	75	198				

GRAND RIVER BASIN

6-8981. Thompson River at Mount Moriah, Mo.

Location.--Lat 40°20'10", long 93°46'05", on line between SE¼ sec.13, and NE¼ sec.24, T.64 N., R.26 W., on downstream side of right pier of bridge on U. S. Highway 136, 0.7 mile upstream from Panther Creek, 1½ miles northeast of Mount Moriah, and at mile 43.

Drainage area.--891 sq mi, including Panther Creek.

Discharge records available.--September 1960 to September 1969.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 14, 1961	0900	33	129
Mar. 1, 1961	1400	44	315
Apr. 5, 1961	0920	42	558
May 17, 1961	0805	57	250
June 7, 1961	1550	78	111
June 19, 1961	1450	83	244
July 5, 1961	1345	87	166
July 25, 1961	1640	85	372
Aug. 9, 1961	1555	78	82.0
Aug. 23, 1961	0840	67	44.2
Oct. 4, 1961	0845	53	438
Oct. 18, 1961	1535	60	437
Dec. 19, 1961	0940	33	314
Jan. 3, 1962	1455	35	365
Apr. 4, 1962	1340	45	552
May 7, 1962	1055	74	171
May 21, 1962	0830	76	87.3
June 4, 1962	1435	72	354
June 19, 1962	0855	75	172
July 9, 1962	0830	74	104
Aug. 1, 1962	1330	84	56.4
Aug. 14, 1962	1140	82	39.6
Sept. 4, 1962	1300	64	64.9
Sept. 17, 1962	0830	67	39.8
Oct. 1, 1962	0855	59	39.3
Oct. 15, 1962	0815	68	36.0
Nov. 14, 1962	1420	53	53.4
Dec. 5, 1962	0820	37	83.2
Dec. 19, 1962	1115	34	64.9
Apr. 16, 1963	1430	72	111
May 9, 1963	0900	70	356
May 23, 1963	1510	72	194
June 5, 1963	1640	82	140
June 19, 1963	1455	81	61.5
July 15, 1963	0840	78	38.0
July 22, 1963	0830	79	103
Aug. 1, 1963	1355	90	35.1
Aug. 19, 1963	0840	62	39.7
Sept. 11, 1963	0835	71	238
Sept. 23, 1963	1345	66	41.4
Oct. 9, 1963	0905	65	19.6
Oct. 28, 1963	0855	50	21.2
Nov. 14, 1963	1450	48	15.4
Dec. 4, 1963	1030	39	26.6
Feb. 19, 1964	0825	34	31.2
Mar. 6, 1964	0920	39	32.5
Mar. 23, 1964	1125	44	40.4
Apr. 7, 1964	0930	44	171
Apr. 29, 1964	1005	56	578
May 9, 1964	0950	64	3,230
May 11, 1964	1505	69	473
May 20, 1964	1345	82	137
June 3, 1964	1335	78	81.9
June 29, 1964	1345	85	343
July 9, 1964	1000	80	325
July 22, 1964	0855	86	200
Sept. 8, 1964	0835	70	6,580
Oct. 13, 1964	0855	49	149
Nov. 4, 1964	0905	58	102
Nov. 20, 1964	0900	35	88.8
Dec. 22, 1964	0955	33	62.4
Mar. 11, 1965	0750	35	305
Mar. 17, 1965	1525	34	9,150
May 6, 1965	0910	68	288
May 19, 1965	1100	68	218
June 4, 1965	0840	72	377
June 22, 1965	1420	82	135
July 8, 1965	1515	84	444
July 26, 1965	1410	85	99.9
Aug. 24, 1965	1455	76	38.5
Oct. 8, 1965	0920	55	232
Oct. 20, 1965	0845	59	135
Nov. 4, 1965	0905	45	106
Dec. 3, 1965	0935	37	119
Dec. 13, 1965	1345	41	158
Feb. 18, 1966	1055	34	192
Mar. 11, 1966	1255	48	215
Mar. 23, 1966	1440	44	311
Apr. 17, 1966	1355	55	122
Apr. 22, 1966	0855	52	286
May 6, 1966	0850	65	119
June 8, 1966	0810	66	278
June 22, 1966	0845	74	207
July 8, 1966	1045	82	85.3
Aug. 10, 1966	1445	76	136
Aug. 25, 1966	1415	77	112
Sept. 14, 1966	1440	68	49.3
Sept. 28, 1966	0930	59	27.7
Oct. 12, 1966	1410	60	38.4
Oct. 31, 1966	0950	46	21.1
Nov. 18, 1966	1150	44	29.9
Dec. 15, 1966	1215	34	29.7
Jan. 5, 1967	1450	32	7.70
Feb. 1, 1967	1140	34	78.7
Mar. 1, 1967	0920	34	16.4
Mar. 16, 1967	1040	39	57.9
Mar. 30, 1967	1415	65	201
Apr. 6, 1967	0915	62	125
Apr. 27, 1967	1210	55	206
May 2, 1967	0800	50	98.1
May 11, 1967	1355	59	125
May 31, 1967	1225	55	2,880
July 3, 1967	1225	73	322
July 20, 1967	1105	79	113
Aug. 10, 1967	0925	68	60.6
Sept. 8, 1967	1005	69	26.0
Sept. 21, 1967	1120	67	33.2
Oct. 5, 1967	1025	63	128
Oct. 26, 1967	1340	45	29.9
Nov. 8, 1967	0955	39	40.2
Nov. 28, 1967	1405	38	23.4
Feb. 6, 1968	1030	34	108
Feb. 27, 1968	0930	34	28.2
Mar. 11, 1968	1135	41	160
Mar. 21, 1968	0915	35	48.0
Apr. 16, 1968	1000	55	85.7
May 24, 1968	1240	65	68.9
July 3, 1968	1035	71	79.0
July 12, 1968	1135	80	53.1
Aug. 26, 1968	1430	81	23.9
Mar. 18, 1969	0920	44	141
May 1, 1969	0925	58	622
May 29, 1969	0930	74	335
July 16, 1969	1520	90	397
Sept. 15, 1969	1035	68	120

GRAND RIVER BASIN

6-8985. Weldon River near Mercer, Mo.

Location.--Lat 40°33', long 93°36', in SW¼ sec.3, T.66 N., R.24 W., near center of span on downstream side of county highway bridge, 4½ miles northwest of Mercer and 5 miles upstream from Little River.

Drainage area.--246 sq mi.

Discharge records available.--September 1939 to September 1959 (discontinued). Discharge measurements only from October 1959 to September 1969.

Maximum temperature measured.--92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 22, 1945	1400	70	122
Mav 21, 1946	1535	77	38.1
May 22, 1946	0820	63	29.8
July 19, 1946	0800	79	33.8
Aug. 30, 1946	1530	77	24.4
Sept. 25, 1946	1150	73	37.2
Nov. 1, 1946	1400	53	68.5
Dec. 4, 1946	1120	38	21.0
Dec. 18, 1946	1050	33	18.7
Jan. 6, 1947	1725	32	2.73
Mar. 27, 1947	1430	46	146
Apr. 15, 1947	1455	57	110
Apr. 28, 1947	1610	70	68.4
May 12, 1947	1715	69	36.2
May 25, 1947	1340	69	118
July 7, 1947	1635	83	65.8
July 28, 1947	1645	87	5.57
Aug. 30, 1946	0945	87	1.86
Sept. 19, 1947	0730	71	.76
Nov. 9, 1947	1720	41	2.57
Nov. 29, 1947	1015	32	3.35
Jan. 20, 1948	1600	34	2.85
Jan. 27, 1948	0800	32	2.33
Mar. 10, 1948	1130	32	44.8
Apr. 8, 1948	0925	48	30.6
Apr. 26, 1948	1515	73	77.8
Apr. 26, 1948	1515	73	68.9
May 11, 1948	1530	58	36.0
May 23, 1948	1220	85	6.56
June 9, 1948	1410	86	1.02
June 26, 1948	1515	87	4.18
July 12, 1948	1220	92	1.58
July 27, 1948	2100	79	25.3
Aug. 13, 1948	0745	72	1.93
Oct. 13, 1948	1230	67	.90
Nov. 14, 1948	0910	37	.85
Nov. 30, 1948	1315	35	1.63
Dec. 22, 1948	0830	32	1.28
Mar. 10, 1949	1715	36	60.0
Apr. 5, 1949	0910	48	42.1
May 2, 1949	1520	79	14.2
June 6, 1949	0930	80	5.27
July 8, 1949	1625	90	12.6
Aug. 3, 1949	0800	74	3.45
Oct. 12, 1949	1210	60	2.27
Dec. 6, 1949	1050	37	2.46
Jan. 28, 1950	0900	32	8.65
Feb. 18, 1950	0825	32	94.2
Mar. 17, 1950	0915	35	29.7
Apr. 12, 1950	0800	34	46.0
June 7, 1950	1440	77	15.1
Sept. 6, 1950	1600	79	1.04
Oct. 6, 1950	1012	64	2.52
Nov. 2, 1950	1410	59	1.48
Dec. 15, 1950	0845	32	.82
Jan. 9, 1951	1400	32	.55
Oct. 16, 1951	1335	64	7.28
Dec. 12, 1951	0805	34	19.9
Mar. 22, 1952	0825	35	364
Sept. 19, 1952	1410	63	544
Oct. 16, 1952	1135	61	544
Nov. 21, 1952	1055	42	6.30
Dec. 12, 1952	1450	34	10.2
Jan. 15, 1953	1055	34	18.8
May 21, 1962	1045	83	10.8
Aug. 1, 1962	1045	77	4.28
Sept. 12, 1962	1510	82	13.5
Aug. 27, 1963	0810	70	1.57
Oct. 4, 1963	1100	67	.65
Oct. 9, 1963	1125	73	1.86
Nov. 6, 1963	0915	52	1.90
Aug. 19, 1964	0800	71	1.88
Sept. 21, 1964	0930	66	101
Oct. 19, 1964	0820	43	7.64
Oct. 7, 1965	0915	55	18.7
Aug. 31, 1966	1150	88	1.32
Oct. 7, 1968	1420	67	3.11

GRAND RIVER BASIN

6-8990. Weldon River at Mill Grove, Mo.

Location.--Lat 40°18', long 93°36', in SE¼SE¼ sec.28, T.64 N., R.24 W., on left bank on upstream side of county highway bridge in Mill Grove, 8½ miles upstream from West Muddy Creek and at mile 18.

Drainage area.--494 sq mi.

Discharge records available.--April 1929 to September 1969.

Maximum temperature measured.--97° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 22, 1945	1220	64	109	Feb. 8, 1961	1300	34	11.1
May 21, 1946	1340	63	88.9	Mar. 1, 1961	1145	48	124
July 18, 1946	1540	85	196	Apr. 5, 1961	1050	39	241
Aug. 30, 1946	1210	77	46.2	May 17, 1961	1035	57	104
Sept. 25, 1946	1450	75	79.0	June 7, 1961	1430	78	22.8
Nov. 1, 1946	1015	54	49.0	June 19, 1961	1205	79	45.8
Dec. 4, 1946	0830	33	37.2	July 5, 1961	1205	87	11.1
Dec. 18, 1946	0820	32	12.8	July 26, 1961	1340	83	133
Jan. 8, 1947	1215	32	9.58	Aug. 9, 1961	1150	82	32.2
Jan. 28, 1947	0900	34	149	Aug. 23, 1961	1130	72	22.8
Mar. 27, 1947	1635	43	249	Dec. 13, 1961	1530	34	102
Apr. 16, 1947	0840	43	385	Jan. 18, 1962	1145	33	113
Apr. 29, 1947	0845	62	182	May 7, 1962	0915	66	83.5
May 13, 1947	0925	62	70.3	May 18, 1962	1530	85	25.8
May 25, 1947	1540	65	247	July 5, 1962	1510	86	30.4
July 8, 1947	0825	74	123	Aug. 1, 1962	0815	75	14.0
July 29, 1947	0825	79	14.8	Aug. 14, 1962	1525	83	9.91
Aug. 30, 1947	0700	79	6.42	Sept. 4, 1962	1130	67	34.1
Nov. 9, 1947	1335	43	21.9	Sept. 12, 1962	1340	79	52.8
Nov. 29, 1947	1230	37	14.3	Sept. 26, 1962	1405	68	11.2
Dec. 9, 1947	1430	34	75.5	Oct. 10, 1962	0815	65	67.3
Dec. 17, 1947	0820	33	66.6	Oct. 26, 1962	1420	49	90.2
Jan. 6, 1948	1515	33	19.9	Nov. 7, 1962	1345	48	39.8
Jan. 20, 1948	1300	33	8.76	Dec. 5, 1962	1020	39	69.0
Jan. 27, 1948	1430	32	13.5	Dec. 19, 1962	0840	34	44.9
Mar. 10, 1948	1500	32	41.6	Apr. 17, 1963	0825	65	72.2
Apr. 8, 1948	1215	56	121	May 9, 1963	1135	77	80.8
Apr. 27, 1948	0900	63	137	May 22, 1963	1505	68	65.8
May 12, 1948	0900	59	72.4	June 5, 1963	1350	85	98.2
May 23, 1948	1530	81	17.4	June 19, 1963	1345	78	19.4
June 10, 1948	0830	76	4.85	July 2, 1963	1250	91	11.1
June 26, 1948	1100	77	18.7	July 15, 1963	1540	85	35.8
July 12, 1948	1345	79	26.5	Aug. 1, 1963	1230	87	8.72
July 28, 1948	0645	68	43.6	Aug. 14, 1963	1540	87	7.95
Aug. 13, 1948	0930	78	13.8	Sept. 5, 1963	1440	75	25.5
Aug. 24, 1948	0630	70	1.14	Sept. 18, 1963	1520	82	6.67
Sept. 20, 1948	0730	76	1.16	Oct. 9, 1963	1305	75	5.22
Oct. 13, 1948	1040	68	2.38	Oct. 28, 1963	1110	59	4.78
Nov. 13, 1948	1700	43	2.52	Nov. 14, 1963	1340	44	3.61
Nov. 30, 1948	1510	37	2.58	Dec. 4, 1963	0925	38	5.91
Dec. 21, 1948	1235	34	4.41	Feb. 19, 1964	1055	35	7.68
Feb. 10, 1949	0900	30	3.40	Mar. 18, 1964	1420	48	8.79
Mar. 10, 1949	1630	32	150	Apr. 7, 1964	1055	45	105
Apr. 4, 1949	1610	51	136	May 11, 1964	1340	74	48.1
May 2, 1949	1430	66	41.7	May 20, 1964	1040	78	17.6
July 8, 1949	1410	80	144	June 2, 1964	1520	75	9.24
Dec. 6, 1949	1315	36	9.44	June 29, 1964	1110	85	57.7
Jan. 3, 1950	1650	32	31.0	July 8, 1964	1540	86	133
Jan. 28, 1950	0745	32	26.6	July 22, 1964	1205	97	18.6
Feb. 17, 1950	1535	34	42.6	Aug. 5, 1964	1425	90	33.7
Mar. 16, 1950	1610	37	71.5	Sept. 11, 1964	1315	72	93.2
June 7, 1950	1630	76	43.6	Oct. 13, 1964	1130	53	24.2
Oct. 6, 1950	1250	64	12.8	Nov. 4, 1964	1040	59	32.6
Nov. 2, 1950	1305	58	7.46	Nov. 16, 1964	1435	54	39.2
Dec. 15, 1950	1015	32	5.86	Dec. 22, 1964	1225	33	11.9
Jan. 9, 1951	1340	32	3.48	Mar. 11, 1965	1050	35	171
May 30, 1951	1430	81	77.0	Apr. 23, 1965	1410	74	124
Oct. 16, 1951	1500	62	16.5	May 5, 1965	1315	75	107
Nov. 15, 1951	1540	34	203	May 19, 1965	1310	72	78.2
Feb. 20, 1952	1420	36	116	June 2, 1965	1420	82	114
July 8, 1952	1610	71	32.5	June 22, 1965	1315	82	26.0
Sept. 19, 1952	1325	66	4.30	July 14, 1965	0920	81	15.4
Oct. 16, 1952	0955	51	3.50	July 26, 1965	1315	87	9.74
Nov. 21, 1952	0830	38	15.8	Aug. 24 1965	1405	76	8.22
Dec. 12, 1952	1610	34	19.4	Sept. 8, 1965	1540	88	16.2
Jan. 15, 1953	0905	34	17.5	Sept. 21, 1965	1130	65	17,000
Jan. 25, 1961	1420	33	7.24	Oct. 7, 1965	1125	61	50.3

GRAND RIVER BASIN

Temperature and Discharge of Weldon River at Mill Grove, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 20, 1965	1010	61	31.7				
Nov. 4, 1965	1105	49	21.8				
Dec. 3, 1965	1155	41	26.0				
Dec. 13, 1965	1235	43	59.0				
Feb. 8, 1966	0930	34	63.6				
Mar. 11, 1966	1130	48	85.1				
Mar. 22, 1966	1455	62	103				
Apr. 7, 1966	1220	50	37.6				
Apr. 22, 1966	1125	55	78.3				
May 6, 1966	1015	69	35.1				
June 9, 1966	0935	62	178				
June 21, 1966	1145	83	48.3				
July 7, 1966	1350	94	19.3				
July 26, 1966	1330	88	12.8				
Aug. 16, 1966	1415	96	7.11				
Aug. 25, 1966	1315	84	7.93				
Sept. 14, 1966	1320	70	2.65				
Sept. 27, 1966	1420	68	3.36				
Oct. 12, 1966	1145	55	2.82				
Oct. 21, 1966	1230	59	5.51				
Nov. 18, 1966	1040	45	4.82				
Dec. 14, 1966	1455	34	4.11				
Feb. 1, 1967	1000	34	13.1				
Mar. 1, 1967	1120	35	17.0				
Mar. 16, 1967	0930	38	6.84				
Mar. 30, 1967	1240	70	39.1				
Apr. 5, 1967	1330	64	74.1				
Apr. 27, 1967	1030	52	108				
May 12, 1967	0925	53	409				
May 18, 1967	0940	65	88.4				
July 3, 1967	0930	70	80.7				
July 20, 1967	0950	77	17.7				
Aug. 7, 1967	1345	88	18.5				
Aug. 28, 1967	1400	81	8.08				
Sept. 21, 1967	1000	66	19.2				
Oct. 4, 1967	1010	68	3.19				
Oct. 26, 1967	1130	45	35.5				
Nov. 9, 1967	1320	46	47.6				
Nov. 28, 1967	1240	34	14.9				
Feb. 5, 1968	1340	40	83.6				
Mar. 11, 1968	1015	41	59.3				
Mar 20, 1968	1345	44	58.6				
Apr. 16, 1968	1245	62	132				
May 23, 1968	1155	56	49.8				
June 10, 1968	1010	81	15.4				
July 12, 1968	1025	79	4.53				
Aug. 21, 1968	1100	84	11.1				
Sept. 16, 1968	1410	70	3.66				
Oct. 7, 1968	1205	59	9.14				
Oct. 24, 1968	1255	51	4.69				
Nov. 25, 1968	1045	39	12.3				
Dec. 4, 1968	1620	39	10.5				
Dec. 5, 1968	1215	33	5.17				
Mar. 18, 1969	1055	45	168				
Apr. 21, 1969	1105	59	193				
May 21, 1969	1125	60	72.2				
June 5, 1969	1540	80	32.6				
July 16, 1969	1410	89	135				
July 28, 1969	1355	76	288				
Sept. 15, 1969	0935	69	32.4				

GRAND RIVER BASIN

6-8991. Weldon River near Trenton, Mo.

Location.--SE¼ sec.30, T.62 N., R.24 W., at bridge on County Highway A, 2 miles upstream from mouth and 4 miles northwest of Trenton, Grundy County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 18, 1962	1420	85	42.6				
July 5, 1962	1330	89	45.7				
Sept. 4, 1962	0945	68	49.1				
Aug. 27, 1963	1130	82	16.4				
Oct. 3, 1963	0915	61	8.45				
Oct. 9, 1963	1445	80	12.6				
Nov. 6, 1963	1340	66	11.8				
Aug. 19, 1964	1020	79	9.97				
Sept. 21, 1964	1125	69	170				
Oct. 19, 1964	1600	55	32.3				
Aug. 30, 1965	1415	78	16.3				
Sept. 1, 1966	1000	78	17.4				
Aug. 31, 1967	1520	79	14.7				
Sept. 25, 1968	1050	63	34.1				
Dec. 3, 1968	1655	39	16.8				

GRAND RIVER BASIN

6-8995. Thompson River at Trenton, Mo.

Location.—Lat 40°04'45", long 93°38'35", in SW¼ sec.18, T.61 N., R.24 W., on right bank at downstream side of bridge on old State Highway 6, 1 mile west of Trenton, 1-3/4 miles downstream from Weldon River, and at mile 26.0.

Drainage area.—1,670 sq mi, approximately.

Discharge records available.—June 1921 to September 1923 (published as "near Hickory"), August 1928 to September 1969. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected in vicinity 1910-14 and since 1925 are contained in reports of U. S. Weather Bureau.

Maximum temperature measured.—93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 22, 1945	1035	64	178	June 19, 1961	0835	73	415
Oct. 28, 1945	0840	54	61.7	July 5, 1961	0920	78	306
May 20, 1946	1325	62	778	Aug. 9, 1961	1040	78	189
Aug. 29, 1946	0745	62	694	Aug. 23, 1961	1400	80	122
Sept. 26, 1946	0905	65	160	Dec. 13, 1961	1240	34	187
Nov. 1, 1946	0720	54	227	May 1, 1962	1435	69	497
Dec. 3, 1946	1115	34	147	May 18, 1962	1305	81	181
Dec. 17, 1946	1130	33	74.5	July 5, 1962	1040	84	171
Jan. 8, 1947	0900	31	52.7	July 31, 1962	1415	79	122
Apr. 14, 1947	1630	55	1,680	Aug. 14, 1962	0835	80	73.2
Apr. 29, 1947	1155	67	980	Aug. 29, 1962	1410	85	86.1
Apr. 30, 1947	0700	64	5,770	Sept. 12, 1962	1110	73	235
May 13, 1947	1230	69	330	Sept. 26, 1962	1110	65	62.4
May 26, 1947	0825	62	542	Oct. 10, 1962	1230	70	214
July 8, 1947	1300	81	912	Oct. 26, 1962	1125	46	292
July 29, 1947	1400	90	148	Nov. 7, 1962	1130	46	138
Aug. 29, 1947	1040	86	68.5	Dec. 5, 1962	1145	38	172
Sept. 19, 1947	1415	84	53.7	Dec. 18, 1962	1425	34	106
Nov. 2, 1947	1520	53	322	Apr. 10, 1953	0855	51	289
Nov. 22, 1947	1630	39	98.7	Apr. 24, 1963	1315	50	759
Dec. 17, 1947	0945	33	116	May 22, 1963	1115	62	431
Dec. 30, 1947	0745	34	93.4	June 5, 1963	1000	78	416
Jan. 7, 1948	0900	33	70.0	June 18, 1963	1340	81	130
Jan. 20, 1948	0945	33	75.1	July 3, 1963	1400	89	76.9
Jan. 28, 1948	1230	32	43.3	July 15, 1963	1130	81	364
Apr. 8, 1948	1600	59	588	July 26, 1963	1230	85	839
Apr. 9, 1948	1550	53	356	Aug. 14, 1963	1220	78	62.0
May 12, 1948	1615	59	457	Sept. 3, 1963	1455	80	103
May 24, 1948	1300	76	131	Sept. 18, 1963	1325	78	68.9
June 9, 1948	0820	64	59.4	Oct. 8, 1963	1440	76	28.4
June 26, 1948	0855	73	393	Oct. 28, 1963	1325	61	36.1
July 13, 1948	1425	78	390	Nov. 14, 1963	1120	49	25.1
July 28, 1948	0930	79	280	Dec. 3, 1963	1415	40	44.6
Aug. 12, 1948	1815	87	74.7	Feb. 5, 1964	1215	38	55.3
Sept. 20, 1948	0955	79	23.0	Feb. 19, 1964	1315	41	82.8
Oct. 13, 1948	0845	51	21.6	Mar. 3, 1964	1640	38	46.5
Nov. 13, 1948	1230	41	48.8	Mar. 18, 1964	1150	41	63.8
Dec. 1, 1948	0845	30	8.82	Apr. 7, 1964	1340	46	380
Dec. 21, 1948	1045	33	42.2	May 20, 1964	0815	81	192
Feb. 10, 1949	1835	30	139	June 3, 1964	1115	68	104
Mar. 2, 1949	1130	32	1,690	July 21, 1964	1525	93	281
Apr. 14, 1949	1355	51	741	Aug. 11, 1964	1105	78	94.6
May 2, 1949	1220	72	214	Sept. 8, 1964	1540	74	7,270
Aug. 2, 1949	1420	82	122	Oct. 7, 1964	1145	57	237
Oct. 12, 1949	0820	53	38.8	Oct. 26, 1964	1240	54	137
Nov. 9, 1949	0830	49	46.0	Nov. 16, 1964	1240	53	176
Dec. 6, 1949	1600	40	41.2	Dec. 21, 1964	1515	33	98.7
Jan. 3, 1950	1500	30	118	Jan. 11, 1965	1230	33	278
Jan. 29, 1950	0825	31	81.5	May 5, 1965	1110	71	473
Feb. 17, 1950	0755	34	312	June 2, 1965	1135	70	324
Mar. 16, 1950	0810	36	235	June 22, 1965	1000	75	185
June 7, 1950	1835	78	213	July 8, 1965	1135	81	440
June 29, 1950	1300	74	292	July 26, 1965	1130	82	110
Sept. 6, 1950	1630	70	69.0	Aug. 5, 1965	0900	77	79.1
Oct. 5, 1950	1455	56	57.3	Aug. 16, 1965	1400	83	52.0
Nov. 2, 1950	1055	53	34.6	Sept. 9, 1965	0950	78	199
Dec. 5, 1950	1130	34	33.1	Oct. 7, 1965	1450	62	305
Jan. 30, 1951	0935	32	6.89	Oct. 18, 1965	1555	70	190
Oct. 16, 1951	1615	60	124	Nov. 3, 1965	1430	61	169
July 16, 1952	1040	69	194	Dec. 2, 1965	1115	39	143
Sept. 19, 1952	0810	57	44.3	Dec. 13, 1965	0945	41	240
Oct. 16, 1952	0830	45	29.6	Feb. 17, 1966	0915	34	149
Nov. 20, 1952	1715	44	416	Mar. 8, 1966	1400	40	290
Jan. 14, 1953	1625	35	81.5	Mar. 22, 1966	1200	58	371
Jan. 25, 1961	1200	33	59.8	Apr. 17, 1966	1010	49	176
Feb. 8, 1961	0945	33	62.9	Apr. 22, 1966	1310	57	448
May 17, 1961	1235	58	500	May 5, 1966	1425	74	193
June 7, 1961	0955	73	161	June 1, 1966	1430	76	234

Temperature and Discharge for Thompson River at Trenton, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 7, 1966	1200	90	126				
July 26, 1966	1125	83	117				
Aug. 11, 1966	0830	73	335				
Aug. 25, 1966	1045	73	141				
Sept. 14, 1966	1005	71	49.9				
Sept. 27, 1966	1225	72	36.7				
Oct. 12, 1966	0930	55	24.5				
Oct. 21, 1966	1025	50	39.2				
Nov. 17, 1966	1325	55	39.5				
Dec. 14, 1966	1340	34	35.1				
Jan. 31, 1967	1145	33	106				
Feb. 8, 1967	1240	32	176				
Feb. 15, 1967	1020	35	148				
Mar. 1, 1967	1315	41	65.5				
Mar. 15, 1967	1500	51	73.4				
Mar. 29, 1967	1440	67	513				
Apr. 5, 1967	1020	67	323				
Apr. 20, 1967	1435	63	400				
May 16, 1967	1335	63	308				
July 18, 1967	1300	79	173				
Aug. 7, 1967	1030	79	113				
Aug. 28, 1967	1135	74	59.5				
Sept. 18, 1967	1420	77	54.6				
Oct. 4, 1967	1135	73	42.2				
Oct. 26, 1967	0945	46	203				
Nov. 9, 1967	0955	45	208				
Nov. 28, 1967	1030	34	70.8				
Dec. 13, 1967	1400	37	116				
Feb. 5, 1968	1130	38	324				
Mar. 4, 1968	1225	42	73.4				
Mar. 20, 1968	1145	44	147				
Apr. 15, 1968	1430	50	722				
May 23, 1968	1400	57	175				
June 13, 1968	1405	77	829				
July 9, 1968	1405	84	60.8				
Aug. 21, 1968	1450	90	87.0				
Sept. 16, 1968	1135	69	36.1				
Oct. 7, 1968	0945	53	39.0				
Oct. 24, 1968	1025	50	49.9				
Nov. 22, 1968	1445	45	76.8				
Dec. 3, 1968	1415	39	45.3				
Dec. 5, 1968	0940	33	26.2				
Mar. 18, 1969	1355	56	380				
Apr. 22, 1969	0925	59	711				
May 21, 1969	1335	60	391				
June 19, 1969	1140	76	335				
Sept. 5, 1969	1235	77	154				

GRAND RIVER BASIN

6-8996.8 Grand River at Chillicothe, Mo.

Location.--NE¼ sec.14, T.57 N., R.24 W., at bridge on U. S. Highway 65, 1 mile south of Chillicothe, Livingston County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 29, 1962	0915	81	310				
Aug. 26, 1963	1145	78	185				
Sept. 25, 1963	1330	71	221				
Oct. 7, 1963	1145	75	96.0				
Nov. 5, 1963	1240	60	98.8				
Aug. 19, 1964	1405	85	166				
Aug. 24, 1964	1550	83	300				
Oct. 19, 1964	1100	54	327				
Mar. 18, 1965	1605	35	43,000				
Aug. 30, 1965	1115	72	159				
Aug. 19, 1966	1045	79	297				
Aug. 31, 1967	1135	68	150				
Oct. 21, 1968	1355	67	161				
Dec. 5, 1968	0850	34	162				

GRAND RIVER BASIN

6-8997. Shoal Creek near Braymer, Mo.

Location.--Lat 39°40'50", long 93°46'05", in NW¼NE¼ sec.13, T.56 N., R.26 W., at downstream side of left pier of bridge on County Highway O, 1-3/4 miles downstream from Panther Creek, and 6 miles north of Braymer.

Drainage area.--391 sq mi.

Discharge records available.--October 1957 to September 1969.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 23, 1961	1100	36	4.99
Feb. 16, 1961	1015	33	38.4
Feb. 27, 1961	1105	38	47.4
June 5, 1961	0835	69	35.6
July 24, 1961	0925	73	79.5
Aug. 7, 1961	1210	76	50.4
Aug. 21, 1961	1055	69	11.0
Sept. 11, 1961	1000	74	4.78
Jan. 2, 1962	1050	34	104
Apr. 30, 1962	0930	65	64.9
May 14, 1962	0820	70	23.6
Aug. 27, 1962	0840	69	32.7
Sept. 10, 1962	0905	62	154
Sept. 24, 1962	0830	63	1.97
Nov. 5, 1962	0940	42	22.5
Nov. 26, 1962	1130	41	20.8
Dec. 10, 1962	1140	34	16.5
Dec. 17, 1962	0915	34	7.67
Apr. 10, 1963	1305	54	28.0
Apr. 22, 1963	1505	62	22.1
May 23, 1963	1125	58	102
June 6, 1963	1145	76	27.6
June 19, 1963	1050	71	9.11
July 3, 1963	1125	80	7.73
July 16, 1963	0900	75	17.4
July 26, 1963	1050	78	2.03
Aug. 12, 1963	1000	75	3.72
Sept. 3, 1963	0855	74	.93
Sept. 18, 1963	1040	72	.47
Oct. 7, 1963	1005	64	.11
Oct. 23, 1963	1045	69	.12
Nov. 12, 1963	0935	46	.23
Dec. 2, 1963	0940	34	1.16
Mar. 4, 1964	1255	37	2.44
Mar. 16, 1964	0915	46	5.12
Mar. 30, 1964	0940	35	44.2
Apr. 16, 1964	1145	60	19.6
May 5, 1964	0835	68	110
May 18, 1964	1820	75	17.7
June 1, 1964	0900	62	48.7
July 10, 1964	1020	78	48.6
July 20, 1964	0955	78	17.9
Sept. 9, 1964	0925	75	88.9
Oct. 5, 1964	0900	53	6.31
Oct. 28, 1964	1415	57	2.49
Nov. 9, 1964	0930	54	9.35
Jan. 20, 1965	1225	33	42.5
Apr. 19, 1965	1000	54	144
May 3, 1965	0925	66	83.5
May 13, 1965	1400	69	58.0
May 24, 1965	1155	72	29.3
June 9, 1965	1100	71	67.1
June 23, 1965	1335	76	31.2
July 12, 1965	0905	74	41.4
Aug. 16, 1965	1145	76	13.5
Sept. 9, 1965	1220	77	24.5
Oct. 5, 1965	1525	60	61.9
Nov. 2, 1965	1410	55	26.3
Dec. 21, 1965	1025	36	22.1
Feb. 17, 1966	1330	35	46.9
Mar. 7, 1966	0920	34	16.7
Mar. 23, 1966	0945	50	46.8
Apr. 1, 1966	1205	54	24.5
May 5, 1966	1020	63	37.2
June 1, 1966	1205	67	8.77
July 6, 1966	1320	82	6.05
July 25, 1966	1015	77	2.15
Aug. 15, 1966	0850	71	9.18
Aug. 30, 1966	0900	69	1.44
Sept. 12, 1966	0910	65	.90
Sept. 26, 1966	1015	58	1.93
Oct. 10, 1966	0925	55	.56
Oct. 24, 1966	0940	47	1.24
Nov. 21, 1966	0925	45	.94
Dec. 13, 1966	0940	34	1.49
Jan. 25, 1967	1435	34	4.20
Feb. 13, 1967	0955	33	21.3
Feb. 27, 1967	0925	33	4.38
Mar. 13, 1967	0935	44	7.56
Apr. 3, 1967	1050	56	3,400
Apr. 21, 1967	1155	61	111
Apr. 26, 1967	1040	48	84.2
May 15, 1967	0940	55	53.9
July 17, 1967	1020	69	28.0
Aug. 8, 1967	1010	75	6.64
Aug. 24, 1967	1210	72	2.14
Sept. 19, 1967	0930	68	6.78
Oct. 2, 1967	0930	59	6.28
Oct. 23, 1967	0930	53	26.5
Nov. 7, 1967	1455	39	176
Dec. 11, 1967	0910	39	97.6
Feb. 8, 1968	1250	35	99.1
Mar. 19, 1968	1115	52	47.4
Apr. 5, 1968	1055	48	272
Apr. 25, 1968	1425	52	451
May 22, 1968	1510	55	30.0
June 18, 1968	0925	69	21.1
July 8, 1968	1140	73	2.31
Aug. 19, 1968	1100	75	18.1
Sept. 17, 1968	1530	64	1.41
Oct. 14, 1968	1030	62	12.4
Nov. 22, 1968	1240	39	27.6
Dec. 4, 1968	1010	35	19.0
Mar. 17, 1969	1140	41	56.0
Apr. 16, 1969	1245	58	204
July 30, 1969	1020	73	34.2
Aug. 20, 1969	1530	75	52.5
Sept. 25, 1969	1600	62	168

GRAND RIVER BASIN

6-9000. Medicine Creek near Galt, Mo.

Location.—Lat 40°07'45", long 93°21'45", in SW¼NW¼ sec.34, T.62 N., R.22 W., on downstream side of left pier of bridge on State Highway 6, 1¼ miles east of Galt, 2 miles upstream from West Medicine Creek, and at mile 32.0.

Drainage area.—225 sq mi.

Discharge records available.—July 1921 to September 1969. Monthly discharge only for some periods, published in WSP 1310.

Maximum temperature measured.—98° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 29, 1945	0900	54	7.55	Oct. 15, 1952	1740	50	3.20
July 18, 1946	1000	84	233	Nov. 20, 1952	1545	46	4.50
Aug. 28, 1946	1215	69	88.2	Dec. 13, 1952	1120	34	2.51
Sept. 26, 1946	1130	76	35.2	Jan. 14, 1953	1505	36	9.94
Oct. 31, 1946	1345	56	39.2	June 10, 1954	0730	75	25.6
Dec. 3, 1946	1530	36	35.7	Jan. 24, 1961	1345	33	6.18
Dec. 17, 1946	1415	34	24.3	Feb. 17, 1961	1215	42	36.6
Jan. 7, 1947	1450	32	7.27	Feb. 28, 1961	1250	40	50.3
Jan. 27, 1947	1515	36	115	Apr. 3, 1961	1215	50	94.6
Mar. 27, 1947	1035	41	127	Apr. 10, 1961	1305	50	118
Apr. 14, 1947	1430	61	143	Apr. 25, 1961	1320	59	260
Apr. 29, 1947	1550	70	142	May 16, 1961	1520	66	42.2
May 14, 1947	1020	72	31.7	June 7, 1961	0655	74	12.2
May 26, 1947	1050	68	132	June 20, 1961	0940	73	22.6
June 15, 1947	1355	71	299	July 26, 1961	0725	77	53.0
July 9, 1947	1015	79	94.0	Aug. 8, 1961	1710	84	18.8
July 29, 1947	1050	89	11.1	Aug. 22, 1961	1440	79	10.0
Aug, 29, 1947	1315	93	5.32	Oct. 2, 1961	1015	53	470
Sept. 19, 1947	1200	88	3.30	Oct. 18, 1961	1410	62	78.8
Oct. 26, 1947	1140	59	7.52	Nov. 28, 1961	1505	41	100
Nov. 23, 1947	0825	32	5.33	Dec. 12, 1961	1430	34	56.0
Dec. 29, 1947	1550	38	13.8	Dec. 26, 1961	1230	34	96.7
Jan. 7, 1948	1500	34	9.74	Mar. 6, 1962	1405	36	58.0
Apr. 10, 1948	0920	56	44.8	May 1, 1962	1330	69	38.4
Apr. 27, 1948	1300	70	43.2	May 15, 1962	1335	81	27.6
May 12, 1948	1215	57	99.1	June 14, 1962	0915	70	108
May 24, 1948	1500	79	11.0	July 3, 1962	1410	93	14.4
June 9, 1948	1035	77	5.72	July 18, 1962	1455	88	22.7
June 25, 1948	1645	78	32.3	July 31, 1962	1300	84	9.60
July 12, 1948	1610	84	7.81	Aug. 14, 1962	1700	85	7.28
July 28, 1948	1800	79	5.55	Aug. 28, 1962	1640	85	17.6
Aug. 13, 1948	1045	79	3.21	Sept. 11, 1962	1450	73	66.2
Aug. 23, 1948	1730	89	1.75	Sept. 25, 1962	1500	72	6.96
Sept. 20, 1948	1715	82	1.40	Oct. 23, 1962	1430	54	80.4
Oct. 12, 1948	1740	65	2.13	Nov. 6, 1962	1500	46	23.8
Nov. 13, 1948	1050	46	2.27	Dec. 4, 1962	1405	49	30.2
Nov. 30, 1948	1650	35	2.86	Dec. 18, 1962	1250	34	18.1
Dec. 21, 1948	0820	32	1.20	Apr. 10, 1963	1050	50	43.8
Feb. 10, 1949	1200	30	1.05	Apr. 24, 1963	1040	51	30.4
Mar. 10, 1949	1030	32	157	May 6, 1963	1415	73	111
Apr. 14, 1949	1715	50	137	May 22, 1963	1340	68	41.6
May 1, 1949	1710	62	30.9	June 5, 1963	1140	85	25.9
July 7, 1949	1620	84	14.2	June 18, 1963	1240	86	7.61
Sept. 7, 1949	1100	69	9.02	July 2, 1963	1110	91	6.87
Oct. 11, 1949	1340	65	6.38	July 15, 1963	1320	83	80.9
Nov. 9, 1949	1000	52	8.80	July 26, 1963	1405	92	8.52
Dec. 6, 1949	1700	38	7.11	Aug. 13, 1963	1345	83	5.56
Jan. 4, 1950	0930	30	28.7	Sept. 3, 1963	1325	83	6.43
Jan. 28. 1950	1710	32	25.4	Sept. 17, 1963	1420	83	5.23
Feb. 16, 1950	1620	35	123	Oct. 8, 1963	1215	77	2.24
Mar. 15, 1950	1600	35	39.3	Oct. 22, 1963	1425	80	3.80
June 7, 1950	0710	79	40.2	Nov. 13, 1963	1500	42	2.37
June 27, 1950	1215	74	39.6	Dec. 3, 1963	1155	39	3.50
Aug. 21, 1950	1340	69	21.0	Feb. 18, 1964	1335	45	6.92
Sept. 7, 1950	0815	58	6.88	Mar. 3, 1964	1355	36	4.99
Nov. 2, 1950	0935	52	4.41	Mar. 17, 1964	1520	49	18.6
Dec. 5, 1950	1030	32	3.51	Apr. 2, 1964	1240	60	22.4
Jan. 9, 1951	1040	32	2.47	May 6, 1964	1430	78	38.9
Jan. 30, 1951	0810	32	1.04	May 19, 1964	1620	83	14.8
July 14, 1951	1545	82	45.0	June 2, 1964	1310	77	6.85
Oct. 17, 1951	0805	54	11.7	June 25, 1964	1415	86	81.4
Nov. 15, 1951	1130	42	99.0	July 9, 1964	1215	84	75.0
Jan. 3, 1952	1415	33	7.69	July 21, 1964	1400	98	12.6
Mar. 21, 1952	1355	38	283	Aug. 5, 1964	1210	92	3.17
Apr. 7, 1952	1500	66	77.4	Sept. 10, 1964	1515	80	45.5
June 12, 1952	0655	89	13.4	Oct. 6, 1964	1525	61	12.3
July 8, 1952	1135	74	17.7	Oct. 26, 1964	1530	58	6.33
Sept. 19, 1952	1035	62	3.85	Nov. 10, 1964	1320	61	7.41

Temperature and Discharge of Medicine Creek near Galt, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 21, 1964	1250	33	9.57				
Jan. 6, 1965	0950	34	104				
Mar. 10, 1965	1450	39	95.7				
Apr. 2, 1965	1500	45	142				
Apr. 23, 1965	1215	72	71.5				
May 4, 1965	1420	79	44.6				
May 17, 1965	1100	70	25.9				
June 2, 1965	1015	74	41.3				
June 21, 1965	0925	72	20.1				
July 13, 1965	1305	93	15.0				
Aug. 5, 1965	1010	81	5.18				
Aug. 24, 1965	1135	74	4.41				
Sept. 8, 1965	1350	85	10.7				
Oct. 6, 1965	1130	61	21.2				
Oct. 18, 1965	1450	73	16.0				
Nov. 3, 1965	1225	61	10.2				
Dec. 2, 1965	1245	40	11.9				
Feb. 17, 1966	1100	34	31.0				
Mar. 8, 1966	1220	40	38.8				
Mar. 22, 1966	0905	54	43.8				
Apr. 4, 1966	0900	42	16.4				
May 5, 1966	1225	74	21.2				
June 2, 1966	0910	64	9.99				
June 16, 1966	1030	67	122				
July 7, 1966	0855	75	10.6				
July 26, 1966	0955	81	6.63				
Aug. 16, 1966	1140	85	5.38				
Aug. 25, 1966	0925	63	4.22				
Sept. 13, 1966	1110	78	2.67				
Sept. 27, 1966	1055	63	3.11				
Oct. 11, 1966	1355	61	1.77				
Oct. 25, 1966	1210	50	2.53				
Nov. 17, 1966	1110	52	2.83				
Dec. 14, 1966	1235	36	3.10				
Jan. 30, 1967	1010	33	17.0				
Feb. 14, 1967	1445	36	18.9				
Feb. 28, 1967	1410	41	4.47				
Mar. 14, 1967	1450	42	4.54				
Mar. 28, 1967	1440	63	102				
Apr. 13, 1967	1325	56	4,190				
Apr. 20, 1967	1120	58	68.7				
May 12, 1967	1115	55	162				
May 29, 1967	1045	64	34.9				
July 12, 1967	1850	82	16.4				
Aug. 7, 1967	1155	80	13.9				
Aug. 28, 1967	0935	61	6.23				
Sept. 18, 1967	1225	71	8.33				
Oct. 3, 1967	1435	78	5.85				
Oct. 24, 1967	1350	58	26.2				
Nov. 9, 1967	1115	43	62.1				
Dec. 13, 1967	1135	37	43.0				
Feb. 5, 1968	1005	34	62.4				
Mar. 20, 1968	1000	43	44.8				
Apr. 12, 1968	1010	58	21.8				
May 20, 1968	0900	53	29.1				
June 13, 1968	1020	72	10.8				
July 9, 1968	1120	83	5.39				
Aug. 20, 1968	1240	83	16.1				
Sept. 17, 1968	0930	65	12.8				
Sept. 24, 1968	1535	73	142				
Oct. 21, 1968	1000	53	9.36				
Nov. 18, 1968	1030	38	80.0				
Dec. 12, 1968	0945	44	19.1				
Mar. 17, 1969	1520	54	41.4				
Apr. 21, 1969	1440	65	121				
May 19, 1969	1015	58	39.2				
July 28, 1969	1020	71	252				
Sept. 5, 1969	1045	74	8.24				

GRAND RIVER BASIN

6-9015. Locust Creek near Linneus, Mo.

Location.--Lat 39°53'45", long 93°14'10", in NW¼NE¼ sec.34, T.59 N., R.21 W., on right bank 25 ft downstream from county highway bridge, 2 miles northwest of Linneus, 5 miles downstream from West Locust Creek, and at mile 21.

Drainage area.--550 sq mi, approximately.

Discharge records available.--October 1928 to September 1969. Prior to April 1929 monthly discharge only published in WSP 1310.

Maximum temperature measured.--98° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 21, 1945	1700	66	23.7
May 19, 1946	1430	63	319
July 17, 1946	0755	88	27.8
Aug. 28, 1946	0905	68	130
Sept. 26, 1946	1400	79	38.6
Oct. 31, 1946	1100	55	40.0
Dec. 19, 1946	1310	33	72.8
Jan. 9, 1947	0950	32	15.7
Feb. 7, 1947	1200	32	40.5
Feb. 18, 1947	1410	34	77.3
Apr. 14, 1947	0935	51	352
May 2, 1947	1055	57	1,250
May 14, 1947	1345	70	69.4
May 26, 1947	1350	72	238
July 9, 1947	1325	80	256
July 30, 1947	1635	94	24.8
Oct. 26, 1947	0940	58	106
Nov. 23, 1947	1010	36	172
Dec. 29, 1947	1330	37	47.8
Jan. 29, 1948	1420	32	18.6
Apr. 11, 1948	1415	59	129
Apr. 29, 1948	0905	60	124
May 25, 1948	0910	64	32.6
June 8, 1948	1505	82	13.7
June 25, 1948	1440	76	143
July 13, 1948	1650	82	25.3
July 27, 1948	1630	82	20.9
Aug. 13, 1948	1300	79	6.62
Aug. 23, 1948	1500	95	5.09
Nov. 13, 1948	0920	35	3.86
Dec. 2, 1948	0820	31	4.53
Dec. 20, 1948	1545	35	7.51
Feb. 11, 1949	1620	32	12.3
Apr. 13, 1949	1510	49	377
May 1, 1949	1520	70	92.3
July 7, 1949	1340	88	45.4
Dec. 7, 1949	1600	35	14.4
Feb. 16, 1950	1025	33	143
Mar. 14, 1950	1545	35	84.5
June 8, 1950	1115	78	110
June 27, 1950	1545	75	101
Aug. 4, 1950	1100	69	18.6
Oct. 5, 1950	0845	50	15.6
Nov. 1, 1950	1550	62	9.11
Dec. 5, 1950	0800	42	12.9
Jan. 29, 1951	1350	32	4.31
July 14, 1951	1405	84	99.1
Oct. 26, 1951	1315	55	283
Dec. 10, 1951	1500	35	62.9
Feb. 19, 1952	1355	50	103
Aug. 18, 1952	0800	72	59.1
Sept. 18, 1952	1410	79	8.46
Oct. 15, 1952	1315	56	6.10
Nov. 20, 1952	1430	47	8.78
Dec. 13, 1952	1310	34	9.96
Jan. 14, 1953	1340	35	10.4
June 24, 1953	1050	79	9.50
Oct. 28, 1953	1400	56	2.55
June 10, 1954	0905	77	82.3
Jan. 23, 1961	1540	33	12.7
Feb. 6, 1961	1515	33	10.2
Feb. 16, 1961	1635	44	75.1
Feb. 27, 1961	1540	40	140
Apr. 17, 1961	1505	44	179
June 5, 1961	1330	88	35.5
July 26, 1961	0835	77	62.5
Aug. 8, 1961	0910	82	13.5
Aug. 22, 1961	0745	67	12.2
Sept. 11, 1961	1415	83	9.64
Sept. 19, 1961	0825	62	91.8
Oct. 18, 1961	0755	56	113
Dec. 12, 1961	0910	34	68.9
Mar. 5, 1962	1400	34	246
Mar. 13, 1962	1125	34	4,470
Mar. 26, 1962	1440	54	375
Apr. 30, 1962	1425	61	89.5
May 14, 1962	1340	79	57.0
May 25, 1962	1235	76	51.0
June 15, 1962	0950	71	87.3
July 16, 1962	1620	84	153
July 30, 1962	1530	88	17.1
Aug. 15, 1962	1235	85	9.23
Aug. 27, 1962	1720	84	18.2
Sept. 10, 1962	1520	74	66.7
Sept. 24, 1962	1435	71	6.73
Oct. 8, 1962	1520	66	451
Oct. 22, 1962	1600	60	202
Nov. 6, 1962	0940	41	24.0
Dec. 3, 1962	1415	53	32.5
Dec. 17, 1962	1400	35	15.3
Apr. 9, 1963	0745	55	90.9
Apr. 24, 1963	0805	48	68.4
May 8, 1963	0745	67	149
June 6, 1963	1335	88	43.2
June 18, 1963	0730	68	17.6
July 1, 1963	1535	98	9.39
July 17, 1963	0800	75	66.6
July 31, 1963	1315	93	7.83
Aug. 12, 1963	1605	87	12.0
Sept. 5, 1963	0840	70	6.04
Sept. 17, 1963	0725	71	7.73
Oct. 8, 1963	0750	58	1.92
Oct. 22, 1963	0750	64	7.13
Nov. 12, 1963	1345	46	2.58
Dec. 2, 1963	1430	39	7.62
Feb. 3, 1964	1415	37	10.8
Feb. 17, 1964	1355	39	13.7
Mar. 3, 1964	1245	38	9.22
Mar. 17, 1964	0820	39	39.7
Mar. 30, 1964	1555	45	85.2
May 5, 1964	1635	77	77.8
May 19, 1964	0735	70	28.0
June 1, 1964	1345	74	14.9
June 24, 1964	1700	86	123
July 9, 1964	1330	90	13.9
July 20, 1964	1745	88	8.62
Aug. 4, 1964	1425	81	5.57
Sept. 10, 1964	0755	74	55.7
Oct. 5, 1964	1550	62	15.4
Oct. 28, 1964	0830	56	5.89
Nov. 9, 1964	1620	62	12.7
Mar. 17, 1965	1735	40	4,655
Apr. 1, 1965	1700	53	273
Apr. 19, 1965	1230	56	277
May 3, 1965	1440	70	120
May 17, 1965	1215	72	84.6
June 1, 1965	1605	73	73.3
June 21, 1965	1540	82	63.0
July 12, 1965	1420	89	31.3
Aug. 5, 1965	1525	92	7.45
Aug. 23, 1965	1240	82	7.66
Sept. 7, 1965	1410	81	71.0
Oct. 4, 1965	1555	63	60.6
Oct. 18, 1965	1330	70	61.4
Nov. 2, 1965	0825	47	21.6
Dec. 20, 1965	1605	39	26.4
Jan. 5, 1966	1430	40	133
Feb. 23, 1966	1535	34	46.7

Temperature and Discharge of Locust Creek near Linneus, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Mar. 7, 1966	1410	36	51.5				
Mar. 21, 1966	0930	52	110				
Apr. 4, 1966	1510	49	35.2				
May 9, 1966	1535	62	46.2				
June 3, 1966	0835	64	29.6				
June 20, 1966	1440	81	84.6				
July 13, 1966	0920	85	12.2				
July 25, 1966	1520	87	14.3				
Aug. 15, 1966	1320	87	20.6				
Aug. 30, 1966	1330	86	9.05				
Sept. 12, 1966	1555	78	4.04				
Sept. 26, 1966	1345	62	4.42				
Oct. 10, 1966	1455	63	2.39				
Oct. 24, 1966	1345	55	4.73				
Nov. 21, 1966	1445	55	6.90				
Dec. 13, 1966	1355	34	6.04				
Jan. 31, 1967	0855	33	19.6				
Feb. 14, 1967	0825	33	38.4				
Feb. 28, 1967	0810	33	5.14				
Mar. 14, 1967	0850	40	14.4				
Mar. 27, 1967	1700	57	1,090				
Apr. 1, 1967	1445	63	13,100				
Apr. 25, 1967	0815	47	353				
May 15, 1967	1610	63	122				
June 26, 1967	1630	76	122				
July 17, 1967	1450	79	31.7				
Aug. 23, 1967	1635	84	20.8				
Sept. 19, 1967	1415	69	79.2				
Oct. 2, 1967	1540	72	24.0				
Oct. 23, 1967	1350	59	56.5				
Dec. 11, 1967	1355	38	142				
Apr. 12, 1968	1100	60	63.2				
Apr. 15, 1968	1710	61	702				
May 16, 1968	0940	63	252				
June 19, 1968	0920	73	25.5				
July 9, 1968	0900	73	10.4				
Aug. 20, 1968	1010	76	184				
Sept. 17, 1968	1120	69	14.0				
Oct. 21, 1968	1135	59	13.4				
Nov. 18, 1968	1225	39	213				
Dec. 12, 1968	1125	47	36.4				
Mar. 17, 1969	1400	50	106				
May 20, 1969	1455	74	103				
July 30, 1969	1510	80	68.2				
Sept. 11, 1969	1120	67	37.3				

GRAND RIVER BASIN

6-9020. Grand River near Sumner, Mo.

Location.--Lat 39°38'25", long 93°16'25", in NE¼ sec.29, T.56 N., R.21 W., near right bank on downstream side of pier of bridge on State Highway 139, 240 feet downstream from Chicago, Burlington & Quincy Railroad bridge, 2 miles southwest of Sumner, 2½ miles downstream from Locust Creek, and at mile 41.0.

Drainage area.--6,880 sq mi, approximately.

Discharge records available.--October 1923 to September 1969. Prior to April 1924 monthly discharge only, published in WSP 1310.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
May 18, 1946	1720	59	14,900
May 19, 1946	0950	59	14,300
Sept. 27, 1946	0820	72	498
Jan. 9, 1947	1415	32	180
Mar. 26, 1947	1005	41	7,310
May 1, 1947	1415	63	8,770
May 15, 1947	0930	72	1,270
May 27, 1947	1210	66	4,140
Oct. 25, 1947	1135	62	220
Nov. 23, 1947	1330	38	470
Dec. 18, 1947	0945	34	639
Jan. 29, 1948	0930	32	106
June 8, 1948	1150	73	308
Dec. 1, 1948	1515	40	119
Dec. 20, 1948	0845	34	137
Feb. 11, 1949	1315	32	135
Mar. 3, 1949	1540	33	6,400
Dec. 8, 1949	1200	33	198
Jan. 30, 1950	1140	32	525
Mar. 15, 1950	1025	35	1,330
Dec. 4, 1950	1645	35	149
Jan. 8, 1951	1430	32	124
Jan. 29, 1951	0950	32	95.8
Oct. 15, 1952	1130	53	119
Nov. 11, 1952	0940	38	125
Jan. 14, 1953	1155	34	206
June 24, 1953	0930	78	388
Oct. 28, 1953	1100	53	62.4
Jan. 23, 1961	1345	35	307
Feb. 6, 1961	1315	33	203
Aug. 15, 1962	1405	76	296
Sept. 24, 1962	1140	68	196
Nov. 26, 1962	1400	43	636
Jan. 2, 1963	1235	33	320
Apr. 22, 1963	1300	65	1,040
June 17, 1963	1355	76	418
July 1, 1963	1310	90	449
July 31, 1963	1105	83	246
Aug. 12, 1963	1235	80	337
Sept. 4, 1963	0850	74	229
Sept. 16, 1963	1330	73	383
Oct. 7, 1963	1345	77	99.4
Oct. 21, 1963	1350	71	439
Nov. 12, 1963	1135	49	94.2
Dec. 2, 1963	1215	38	174
Feb. 3, 1964	1410	40	227
Feb. 17, 1964	1120	36	142
Mar. 16, 1964	1300	51	285
Mar. 30, 1964	1340	39	692
May 18, 1964	1545	70	864
Aug. 4, 1964	1200	85	308
Sept. 9, 1964	1450	75	21,300
Oct. 28, 1964	1115	60	343
Nov. 9, 1964	1135	57	586
Jan. 4, 1965	1225	35	31,400
Nov. 2, 1965	1110	55	588
Dec. 20, 1965	1400	39	495
Jan. 27, 1966	1340	33	316
Feb. 14, 1966	0925	35	2,030
May 10, 1966	0940	56	509
June 3, 1966	1030	67	599
July 13, 1966	0720	84	383
Aug. 30, 1966	1100	84	236
Sept. 12, 1966	1435	77	155
Sept. 26, 1966	1210	62	138
Oct. 10, 1966	1225	63	96.5
Oct. 24, 1966	1150	60	176
Nov. 21, 1966	1140	51	137
Jan. 25, 1967	1150	34	298
Feb. 13, 1967	1225	39	484
Feb. 27, 1967	1240	35	257
Mar. 13, 1967	1245	47	218
Aug. 22, 1967	0940	72	320
Aug. 24, 1967	0825	74	263
Sept. 19, 1967	1210	73	246
Oct. 2, 1967	1140	64	254
Oct. 24, 1967	1025	56	592
Nov. 7, 1967	1100	39	2,710
Dec. 12, 1967	0850	39	1,080
Jan. 11, 1968	1320	33	280
Feb. 6, 1968	1035	37	1,830
Mar. 11, 1968	1740	42	1,040
Apr. 11, 1968	1450	64	785
Apr. 12, 1968	1230	63	708
May 9, 1968	1420	62	1,530
June 18, 1968	1425	79	594
June 20, 1968	0845	78	435
July 8, 1968	1525	84	222
July 11, 1968	1040	78	192
Aug. 8, 1968	1030	82	2,780
Sept. 17, 1968	1315	70	205
Oct. 14, 1968	1420	67	602
Oct. 15, 1968	0910	64	476
Nov. 19, 1968	1135	37	1,440
Dec. 10, 1968	1010	34	271
Jan. 21, 1969	1215	33	9,000
Mar. 11, 1969	0900	33	1,250
Apr. 8, 1969	1000	58	4,400
May 6, 1969	0930	68	2,700
June 17, 1969	0900	66	1,960
July 23, 1969	1300	80	5,000
Aug. 20, 1969	0930	78	1,100
Sept. 23, 1969	0930	64	16,900

6-9022. West Yellow Creek near Brookfield, Mo.

Location.--Lat 39°50'40", long 93°01'36", in SE¼NE¼ sec.16, T.58 N., R.19 W., at right downstream pier of county highway bridge, 3½ miles northeast of Brookfield, and 1½ miles downstream from Bear Creek.

Drainage area.--135 sq mi.

Discharge records available.--July 1959 to September 1969.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 24, 1961	0900	33	0.24
Feb. 16, 1961	1605	34	18.7
Feb. 27, 1961	1645	38	20.0
Apr. 17, 1961	1330	42	34.7
May 16, 1961	0730	59	16.1
June 5, 1961	1600	73	3.42
June 20, 1961	1420	77	2.20
July 24, 1961	1550	76	6.65
Aug. 8, 1961	1055	76	.79
Aug. 21, 1961	1500	76	.50
Sept. 11, 1961	1540	83	.16
Sept. 18, 1961	1545	62	13.9
Oct. 2, 1961	1615	54	84.3
Nov. 28, 1961	0850	40	44.5
Dec. 11, 1961	1500	33	18.3
Jan. 3, 1962	0915	33	23.2
Mar. 6, 1962	0750	33	36.6
Mar. 26, 1962	1620	52	67.8
Apr. 30, 1962	1605	66	11.5
May 14, 1962	1640	73	6.65
May 28, 1962	1530	73	50.0
June 14, 1962	1555	70	.30
July 2, 1962	1420	85	.66
July 17, 1962	0845	75	16.6
July 31, 1962	0740	64	.47
Sept. 11, 1962	0850	61	1.22
Oct. 9, 1962	0835	62	24.7
Oct. 23, 1962	0820	53	8.45
Nov. 6, 1962	0740	40	.27
Dec. 3, 1962	1200	49	.45
Dec. 17, 1962	1545	36	.08
Apr. 8, 1963	1740	61	6.88
Apr. 23, 1963	1520	63	1.65
May 7, 1963	1525	68	19.2
May 20, 1963	1615	65	21.8
June 6, 1963	1450	84	2.21
June 17, 1963	1550	77	1.19
July 1, 1963	1650	89	.72
July 16, 1963	1525	78	7.31
July 31, 1963	1525	88	.06
Aug. 12, 1963	1505	84	.09
Sept. 4, 1963	1615	74	.01
Sept. 16, 1963	1545	78	0
Dec. 2, 1963	1630	36	.18
Mar. 3, 1964	0740	34	.02
Mar. 16, 1964	1600	53	1.23
Apr. 1, 1964	1620	53	11.3
Apr. 22, 1964	0920	58	809
May 5, 1964	1455	75	10.6
May 19, 1964	0950	70	2.80
June 1, 1964	1500	68	1.57
June 24, 1964	1455	80	17.4
July 9, 1964	1435	89	.55
July 21, 1964	0700	78	.08
Sept. 9, 1964	1745	78	6.99
Oct. 5, 1964	1700	54	.28
Oct. 27, 1964	1605	59	0
Nov. 9, 1964	1530	59	0
Apr. 19, 1965	1500	57	42.0
May 17, 1965	1415	69	17.7
June 21, 1965	1330	76	2.80
July 12, 1965	1530	81	1.16
Aug. 23, 1965	1500	76	0
Oct. 4, 1965	1430	60	6.14
Oct. 18, 1965	1210	66	2.03
Nov. 1, 1965	1535	53	1.63
Dec. 20, 1965	1205	36	2.80
Jan. 5, 1966	1550	38	24.3
Feb. 23, 1966	1400	35	5.48
Mar. 7, 1966	1530	35	8.09
Mar. 21, 1966	1055	53	24.4
Apr. 4, 1966	1405	48	7.18
May 9, 1966	1355	61	7.37
June 2, 1966	1540	66	5.61
June 20, 1966	1255	72	17.7
July 13, 1966	1045	80	.62
July 25, 1966	1410	78	1.10
Aug. 15, 1966	1445	78	2.93
Aug. 30, 1966	1510	81	.02
Oct. 24, 1966	1525	55	.10
Dec. 13, 1966	1515	38	.11
Jan. 30, 1967	1510	33	2.27
Feb. 13, 1967	1505	34	12.8
Feb. 27, 1967	1515	34	1.86
Mar. 13, 1967	1510	45	5.42
Mar. 28, 1967	1330	57	336
Apr. 14, 1967	0850	59	2,240
Apr. 24, 1967	1545	51	60.5
May 15, 1967	1455	59	16.4
June 26, 1967	1520	72	17.8
July 17, 1967	1650	[illegible]	4.79
Aug. 23, 1967	1525	[illegible]	3.00
Sept. 19, 1967	1550	69	4.97
Oct. 2, 1967	1430	62	7.38
Oct. 23, 1967	1505	57	11.8
Mar. 18, 1967	1515	53	16.6
Apr. 15, 1968	1540	60	912
May 15, 1968	1510	69	206
June 18, 1968	1635	74	8.21
Aug. 30, 1968	1120	67	1.73
Sept. 10, 1968	1045	62	.47
Sept. 12, 1968	1705	68	.89
Sept. 30, 1968	1535	64	2.08
Nov. 8, 1968	1530	42	3.17
May 19, 1969	1720	62	18.5
June 20, 1969	1345	73	7.48
July 30, 1969	1625	75	5.10
Sept. 11, 1969	0835	63	6.76

GRAND RIVER BASIN

6-9025. Hamilton Branch near New Boston, Mo.

Location.--Lat 39°57'08", long 92°54'08", in SE¼SW¼ sec.3, T.59 N., R.18 W., on right bank at bridge on State Highway 11, 0.5 mile upstream from New Boston Branch and 2½ miles west of New Boston.

Drainage area.--2.51 sq mi.

Discharge records available.--October 1955 to September 1959 (discontinued). Discharge measurements and daily gage-height record available to September 1969.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 17, 1961	0855	37	0.42				
Mar. 28, 1961	1000	44	4.12				
Apr. 17, 1961	1250	41	.88				
May 16, 1961	0830	58	.30				
June 6, 1961	0900	76	.04				
June 20, 1961	1015	84	.01				
Sept. 18, 1961	1500	73	.10				
Oct. 2, 1961	1510	62	1.01				
Oct. 18, 1961	0930	56	.25				
Nov. 28, 1961	1000	36	1.01				
Dec. 11, 1961	1550	34	.35				
Jan. 3, 1962	1015	35	.89				
Mar. 6, 1962	0900	34	1.15				
Mar. 27, 1962	0820	44	1.09				
July 3, 1962	0810	77	.03				
Apr. 23, 1963	1430	64	.01				
Apr. 2, 1964	0945	55	.07				
May 6, 1964	0810	65	.04				
June 24, 1964	1600	81	.23				
Jan. 5, 1965	1040	35	1.36				
Apr. 2, 1965	0805	40	1.18				
Apr. 20, 1965	0730	49	.66				
May 4, 1965	0740	66	.14				
Sept. 8, 1965	0800	70	7.69				
Feb. 28, 1967	0935	34	.12				
Mar. 14, 1967	1015	39	.33				
Apr. 25, 1967	0950	45	.90				
May 16, 1967	0840	50	.19				
June 1, 1967	1455	57	9.49				
Nov. 6, 1967	1310	41	.98				
Dec. 11, 1967	1515	37	1.24				
Mar. 18, 1968	1405	53	.46				
Apr. 15, 1968	1320	63	.80				
May 15, 1968	1350	74	.12				
Dec. 26, 1968	1410	33	----				
Mar. 10, 1969	1010	33	1.05				
Apr. 15, 1969	0920	52	3.24				
May 20, 1969	1340	67	.31				

GRAND RIVER BASIN

6-9029. East Yellow Creek near Brookfield, Mo.

Location.--SW¼ sec.12, T.57 N., R.19 W., at bridge on U. S. Highway 36, 4½ miles southeast of Brookfield, Linn County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 5, 1946	1115	47	0.73				
May 14, 1962	1605	77	5.42				
May 25, 1962	1150	71	5.84				
June 14, 1962	1700	78	5.15				
July 2, 1962	1550	86	3.76				
Aug. 27, 1962	1555	88	.03				
Sept. 24, 1962	1700	71	.04				
June 6, 1963	1615	85	.97				
Aug. 26, 1963	1755	84	.14				
Oct. 5, 1965	1035	56	8.07				
Aug. 15, 1966	1600	88	.33				

GRAND RIVER BASIN

6-9030. Yellow Creek near Rothville, Mo.

Location.--Lat 39°38', long 93°05', on line between sec.31, T.56 N., R.19 W., and sec.36, T.56 N., R.20 W., at bridge on State Highway 11, 2½ miles southwest of Rothville, and 3 miles downstream from East Yellow Creek, Chariton County.

Drainage area.--405 sq mi.

Discharge records available.--April 1929 to June 1932.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 2, 1948	1020	36	1.08				
Dec. 20, 1948	1320	35	.96				
Feb. 11, 1949	1530	32	10.3				
Mar. 3, 1949	1130	32	189				
Oct. 10, 1949	1630	67	2.37				
Dec. 8, 1949	0815	31	1.49				
Feb. 15, 1950	1700	34	451				
Mar. 14, 1950	1430	35	92.4				
June 13, 1950	0915	78	38.4				
Aug. 4, 1950	0800	70	10.2				
Dec. 4, 1950	1740	34	1.30				
Jan. 29, 1951	1315	32	.94				
May 14, 1962	1740	75	27.3				
June 15, 1962	0730	69	27.2				
Sept. 24, 1962	1320	66	.76				
June 7, 1963	0615	77	5.04				
Aug. 26, 1963	1630	78	5.17				
Oct. 5, 1964	1420	57	5.39				
Oct. 20, 1964	1550	51	.59				
Nov. 2, 1965	1000	51	5.20				

CHARITON RIVER BASIN

6-9040.5 Chariton River at Livonia, Mo.

Location.--N½ sec.33, T.66 N., R.16 W., at bridge on U. S. Highway 136, ½-mile east of Livonia, at Putnam-Schuyler County line.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 9, 1962	1520	65	215				
Nov. 13, 1963	1140	39	3.64				
Oct. 20, 1964	0930	46	7.67				
July 19, 1966	1650	87	16.9				
May 7, 1968	1400	60	1,120				
Oct. 9, 1968	1555	57	7.60				
Oct. 21, 1968	1620	60	11.6				
Mar. 20, 1969	1250	42	346				
June 9, 1969	1125	70	168				
Sept. 8, 1969	1020	71	38.5				

CHARITON RIVER BASIN

6-9045. Chariton River at Novinger, Mo.

Location.--Lat 40°14'05", long 92°41'14", on south line SE¼NE¼ sec.28, T.63 N., R.16 W., on right bank at center pier of downstream side of bridge on State Highway 6, 1,000 ft downstream from Chicago, Burlington & Quincy Railroad bridge, 0.6 mile east of Novinger, 1 mile downstream from Rye Creek, 2 miles upstream from Spring Creek, and at mile 73.1.

Drainage area.--1,370 sq mi, approximately.

Discharge records available.--October 1930 to September 1952, October 1954 to September 1969. Prior to February 1931 monthly discharge only, published in WSP 1310.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 15, 1945	1415	80	23.6	Aug. 1, 1963	0845	77	19.7
Sept. 20, 1945	1625	72	35.5	Aug. 13, 1963	1000	74	15.7
June 9, 1946	1600	76	48.9	Sept. 5, 1963	1115	69	22.7
July 12, 1946	1145	83	73.9	Sept. 17, 1963	1025	71	67.3
Aug. 15, 1946	1030	71	98.0	Oct. 8, 1963	1030	68	8.11
Dec. 6, 1946	1000	37	130	Oct. 22, 1963	1050	69	7.49
Feb. 8, 1947	1400	33	166	Nov. 13, 1963	0955	39	4.56
July 23, 1947	1610	70	80.3	Dec. 3, 1963	0940	33	9.47
Oct. 15, 1947	1055	67	11.2	Feb. 4, 1964	1200	38	47.7
Nov. 21, 1947	1055	43	70.5	Feb. 18, 1964	1005	35	19.5
Jan. 15, 1948	1420	34	155	Mar. 3, 1964	1015	38	35.8
June 4, 1948	1500	83	34.3	Mar. 17, 1964	1200	42	84.7
July 10, 1948	1500	91	27.0	Apr. 2, 1964	1010	53	161
Aug. 13, 1948	1320	73	16.1	May 6, 1964	1015	68	218
Sept. 9, 1948	1510	70	42.2	May 19, 1964	1255	82	83.5
Oct. 9, 1948	0815	52	7.50	June 2, 1964	0920	65	66.2
Jan. 5, 1949	1655	34	22.6	July 8, 1964	0840	77	97.3
Apr. 10, 1949	1110	49	297	July 21, 1964	1010	85	106
May 7, 1949	0825	68	93.8	Aug. 5, 1964	0900	79	27.5
Oct. 12, 1949	1630	65	23.2	Oct. 6, 1964	1040	53	43.8
Dec. 7, 1949	1400	35	40.9	Nov. 10, 1964	0930	52	24.4
Jan. 29, 1950	1135	31	155	May 4, 1965	0945	68	362
Feb. 16, 1950	1400	34	757	May 18, 1965	1115	74	169
Oct. 5, 1950	1130	55	13.0	June 1, 1965	1145	63	157
Nov. 2, 1950	0815	52	10.0	June 15, 1965	0955	70	162
Dec. 15, 1950	1300	32	12.8	July 13, 1965	0840	78	46.9
Jan. 29, 1951	1630	32	12.2	Aug. 5, 1965	1210	81	13.6
Oct. 17, 1951	1015	55	47.7	Aug. 24, 1965	0855	73	13.3
July 9, 1952	1310	68	85.7	Oct. 4, 1965	1120	58	303
Sept. 18, 1952	1545	75	17.0	Nov. 1, 1965	1310	51	65.8
Oct. 15, 1952	1535	57	8.23	Dec. 20, 1965	1005	35	91.3
Jan. 24, 1961	1130	34	30.1	Feb. 23, 1966	1015	34	86.4
Feb. 7, 1961	1215	33	20.7	Mar. 8, 1966	0915	33	165
Feb. 17, 1961	1005	34	344	Apr. 4, 1966	1145	44	126
Feb. 28, 1961	0840	34	382	May 9, 1966	1050	57	287
June 6, 1961	1235	78	51.6	June 2, 1966	1250	64	130
June 20, 1961	1020	70	340	June 20, 1966	1005	71	336
July 11, 1961	1200	80	23.8	July 13, 1966	1225	88	33.4
July 26, 1961	1040	75	561	July 26, 1966	0810	80	25.1
Aug. 22, 1961	1035	71	19.2	Aug. 16, 1966	0920	74	21.5
Sept. 12, 1961	0925	74	26.4	Aug. 31, 1966	0825	75	14.0
Dec. 12, 1961	1200	34	166	Sept. 13, 1966	0835	68	9.51
Jan. 3, 1962	1140	34	301	Sept. 27, 1966	0905	58	11.4
May 1, 1962	1030	63	248	Oct. 11, 1966	0940	57	5.07
May 15, 1962	0920	70	149	Oct. 25, 1966	0930	45	8.18
July 3, 1962	0940	79	115	Nov. 22, 1966	1000	52	9.45
July 18, 1962	0745	76	68.5	Dec. 14, 1966	0925	34	14.6
July 31, 1962	1030	71	45.9	Jan. 30, 1967	1220	33	125
Aug. 15, 1962	0750	68	515	Feb. 14, 1967	1140	33	109
Aug. 28, 1962	1050	73	239	Feb. 28, 1967	1115	35	16.9
Sept. 11, 1962	1220	67	80.6	Mar. 14, 1967	1130	39	43.2
Sept. 25, 1962	1245	63	22.8	Apr. 1, 1967	1300	61	11,600
Oct. 9, 1962	1220	64	350	May 16, 1967	1005	56	542
Nov. 6, 1962	1210	40	120	July 18, 1967	0920	70	61.5
Dec. 3, 1962	0950	44	144	Aug. 23, 1967	1110	73	44.5
Dec. 18, 1962	1010	34	57.4	Sept. 20, 1967	1140	71	98.1
Apr. 1, 1963	1245	56	296	Oct. 3, 1967	1010	65	59.6
Apr. 23, 1963	1020	51	204	Oct. 24, 1967	1150	55	219
May 8, 1963	1145	71	368	Dec. 5, 1967	0905	35	32.9
May 21, 1963	1245	64	378	Dec. 13, 1967	0830	36	239
June 7, 1963	0955	79	81.8	Jan. 9, 1968	0855	32	11.9
June 18, 1963	1105	74	35.0	Feb. 6, 1968	0845	33	146
July 2, 1963	0800	81	21.1	Mar. 4, 1968	1650	35	23.3
July 17, 1963	1135	78	74.0	Mar. 18, 1968	1130	50	168

CHARITON RIVER BASIN

Temperature and Discharge of Chariton River at Novinger, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 26, 1968	1035	51	3,340				
May 16, 1968	1235	65	1,220				
June 19, 1968	1730	86	82.4				
Aug. 14, 1968	1545	88	28.5				
Oct. 1, 1968	1415	76	24.0				
Oct. 9, 1968	1555	57	7.60				
Nov. 8, 1968	1155	41	11.5				
Mar. 12, 1969	1830	34	447				
June 4, 1969	1455	66	108				
Sept. 4, 1969	1300	73	56.1				

CHARITON RIVER BASIN

6-9055. Chariton River near Prairie Hill, Mo.

Location.--Lat 39°32'25", long 92°47'23", in NW¼SW¼ sec.26, T.55 N., R.17 W., on right bank on downstream side of bridge on State Highway 129, 3.2 miles northwest of Prairie Hill, 13½ miles upstream from Puzzle Creek, and at mile 19.6.

Drainage area.--1,870 sq mi, approximately.

Discharge records available.--October 1928 to September 1969. Prior to Oct. 1, 1953, published as "near Keytesville". Prior to May 1929, monthly discharge only, published in WSP 1309.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 15, 1945	1045	74	72.8
Oct. 30, 1945	0905	56	67.7
Jan. 10, 1947	0910	32	140
Jan. 7, 1948	1500	33	176
Sept. 21, 1948	1515	84	43.8
Feb. 9, 1954	0910	43	24.6
Mar. 23, 1954	0845	45	19.5
July 18, 1963	0915	84	136
Oct. 1, 1963	1145	72	93.8
Oct. 28, 1963	1200	63	32.4
Jan. 2, 1964	1030	33	12.1
Feb. 5, 1964	1045	39	53.6
Feb. 28, 1964	1120	45	44.7
Apr. 7, 1964	1200	45	2,280
Aug. 26, 1964	1245	81	89.9
Sept. 23, 1964	1105	70	596
Oct. 28, 1964	1130	63	327
Nov. 17, 1964	1050	53	117
Dec. 15, 1964	1140	33	116
Jan. 13, 1965	1610	33	273
Mar. 11, 1965	1010	35	909
Mar. 31, 1965	1820	43	2,790
Apr. 27, 1965	1030	55	3,030
May 20, 1965	1130	68	319
July 21, 1965	0945	77	100
Aug. 24, 1965	1630	77	46.3
Oct. 20, 1965	1145	62	173
Nov. 30, 1965	1255	36	156
Jan. 28, 1966	0845	33	81.5
Feb. 23, 1966	1430	34	169
May 3, 1966	1020	63	331
June 1, 1966	1130	74	292
June 14, 1966	0755	66	9,760
June 28, 1966	1030	72	185
July 26, 1966	1700	90	73.5
Aug. 23, 1965	0930	61	72.7
Sept. 27, 1966	1305	63	38.0
Nov. 1, 1966	1400	47	28.9
Feb. 7, 1967	1035	32	119
Mar. 1, 1967	1430	44	93.5
Mar. 28, 1967	0750	53	2,030
May 3, 1967	1130	56	454
May 9, 1967	1645	62	1,350
May 17, 1967	1330	55	97.3
June 6, 1967	1640	69	9,320
Aug. 2, 1967	1500	79	357
Aug. 21, 1967	1750	79	136
Sept. 7, 1967	1100	72	61.6
Sept. 19, 1967	0830	71	107
Oct. 4, 1967	1400	68	99.5
Oct. 24, 1967	1415	56	245
Nov. 6, 1967	1645	40	940
Nov. 7, 1967	1610	40	1,460
Dec. 12, 1967	1055	38	804
Jan. 11, 1968	0840	33	130
Feb. 6, 1968	0815	36	771
Feb. 22, 1968	1420	32	176
Mar. 11, 1968	1540	43	332
Mar. 19, 1968	1045	54	364
Apr. 2, 1968	0805	50	64.6
Apr. 11, 1968	1710	62	443
Apr. 16, 1968	0900	56	162
Apr. 29, 1968	1105	52	2,240
May 9, 1968	1645	62	1,420
May 14, 1968	1315	68	692
June 20, 1968	1100	80	120
July 11, 1968	1300	82	36.0
Aug. 8, 1968	1235	80	395
Sept. 17. 1968	1020	66	46.0
Oct. 4, 1968	1025	59	47.5
Oct. 14, 1968	1710	72	54.8
Nov. 18, 1968	1505	39	472
Dec. 9, 1968	1615	34	95.6
Jan. 20, 1969	1545	33	1,860
Feb. 17, 1969	1530	36	795
Mar. 10, 1969	1530	33	902
Apr. 7, 1969	1800	58	1,050
May 5, 1969	1815	70	1,160
May 8, 1969	1730	62	14,200
June 6, 1969	1700	72	249
July 22, 1969	1830	82	1,650
Aug. 14, 1969	1250	80	135
Aug. 19, 1969	1700	88	138
Sept. 22, 1969	1725	70	114

CHARITON RIVER BASIN

6-9060. Mussel Fork near Musselfork, Mo.

Location.--Lat 39°31'26", long 92°56'59", in SW¼SW¼SE¼ sec.32, T.55 N., R.18 W., at downstream side of left pier of bridge on State Highway 5, 4½ miles southwest of Musselfork, and 1½ miles upstream from Long Branch.

Drainage area.--267 sq mi.

Discharge records available.--October 1948 to December 1951, October 1962 to September 1969.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
July 6, 1949	1750	80	21.5
Oct. 10, 1949	1520	68	8.68
Aug. 14, 1951	1700	76	18.3
Mar. 20, 1963	0905	42	71.9
May 16, 1963	1150	63	1,580
June 6, 1963	1100	79	7.80
July 18, 1963	1200	80	141
Aug. 9, 1963	1330	79	.50
Sept. 16, 1963	1330	72	.21
Oct. 23, 1963	1345	73	.07
Jan. 3, 1964	1330	33	.26
Jan. 29, 1964	1220	37	.25
Mar. 11, 1964	1330	40	1.45
Apr. 8, 1964	1250	42	344
May 11, 1964	1345	68	15.8
June 8, 1964	1400	73	13.8
July 23, 1964	1400	84	1.40
Aug. 26, 1964	1200	71	.97
Sept. 22, 1964	0950	67	219
Oct. 27, 1964	1415	60	.07
Nov. 17, 1964	0830	55	324
Dec. 15, 1964	1015	33	35.5
Jan. 13, 1965	1425	34	58.5
Feb. 17, 1965	0810	34	81.7
Mar. 11, 1965	0930	35	503
Mar. 18, 1965	1610	36	2,470
Mar. 31, 1965	1510	48	296
Apr. 27, 1965	0815	54	465
May 20, 1965	1515	67	21.8
June 15, 1965	1750	74	7.35
Aug. 24, 1965	1800	73	2.54
Sept. 17, 1965	1820	68	2,260
Oct. 20, 1965	1551	61	12.0
Nov. 30, 1965	1210	36	8.73
Jan. 6, 1966	1205	34	31.7
Jan. 27, 1966	1710	33	6.64
Feb. 23, 1966	1345	34	9.65
Mar. 28, 1965	1735	40	39.8
May 3, 1966	1000	57	43.5
June 1, 1966	1100	66	27.8
June 14, 1966	1440	69	3,100
June 28, 1966	1330	81	14.6
July 27, 1966	0810	77	8.30
Aug. 23, 1966	1400	65	9.80
Nov. 1, 1966	1230	48	1.46
Feb. 3, 1967	1245	32	118
Feb. 28, 1967	1655	34	19.4
Mar. 28, 1967	1050	55	1,010
May 3, 1967	1430	56	53.5
June 6, 1967	1240	61	234
July 6, 1967	1845	70	39.1
Aug. 2, 1967	1820	82	36.5
Sept. 7, 1967	0835	68	4.66
Oct. 4, 1967	1450	68	10.5
Nov. 7, 1967	1225	39	174
Feb. 14, 1968	1305	34	36.1
Mar. 18, 1968	1730	50	33.5
Apr. 22, 1968	1300	56	545
May 13, 1968	0915	64	32.0
June 27, 1968	1200	66	9.37
Aug. 15, 1968	1100	75	13.1
Oct. 7, 1968	1600	57	4.05
Nov. 7, 1968	0835	46	21.5
Apr. 14, 1969	1050	57	166
May 20, 1969	0750	64	54.0
June 20, 1969	0825	68	52.7
July 23, 1969	1635	84	35.8
Aug. 14, 1969	1530	79	7.47
Sept. 16, 1969	0945	66	7.26

LITTLE CHARITON RIVER BASIN

6-9063. East Fork Chariton River near Huntsville, Mo.

Location.--Lat 39°27'19", long 92°34'09", in NE¼NW¼NW¼ sec.26, T.54 N., R.15 W., at downstream side of left pile bent of bridge on County Highway C, 1 mile downstream from Sugar Creek, and 1½ miles northwest of Huntsville.

Drainage area.--220 sq mi.

Discharge records available.--October 1962 to September 1969.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 15, 1962	1415	49	6.47
May 16, 1963	0915	64	813
June 11, 1963	1030	74	2.08
July 10, 1963	1100	73	1.90
Aug. 9, 1963	1130	78	.05
Sept. 16, 1963	1100	68	.87
Oct. 9, 1963	--	69	.60
Oct. 23, 1963	1020	69	.16
Nov. 13, 1963	--	39	.20
Dec. 3, 1963	--	38	.80
Jan. 3, 1964	1030	33	.19
Mar. 11, 1964	1015	39	26.1
Mar. 31, 1964	--	38	110
Apr. 7, 1964	1400	47	1,130
Apr. 21, 1964	--	61	1,060
May 11, 1964	1045	66	18.9
June 8, 1964	1115	71	21.7
June 9, 1964	--	78	12.0
July 7, 1964	--	84	1.40
July 23, 1964	1100	83	.58
Sept. 9, 1964	--	72	198
Sept. 22, 1964	1140	71	14.6
Oct. 7, 1964	1045	53	.70
Nov. 4, 1964	1545	59	---
Nov. 17, 1964	1225	55	55.9
Dec. 1, 1964	1415	32	2.50
Dec. 15, 1964	1430	33	60.3
Jan. 14, 1965	1000	33	17.5
Jan. 26, 1965	1450	34	---
Feb. 17, 1965	1305	38	53.1
Feb. 18, 1965	1250	36	44.0
Mar. 11, 1965	1635	37	267
Mar. 17, 1965	0945	42	1,260
Mar. 18, 1965	1340	34	1,380
Apr. 1, 1965	1315	46	248
Apr. 13, 1965	1710	54	---
Apr. 27, 1965	1305	55	43.6
May 12, 1965	--	81	8.00
May 20, 1965	1040	68	21.0
June 15, 1965	0850	69	16.6
July 13, 1965	1815	84	6.20
July 20, 1965	1150	78	76.6
Aug. 10, 1965	1645	77	1.60
Aug. 24, 1965	1355	71	1.23
Sept. 8, 1965	1100	71	178
Oct. 6, 1965	0900	57	6.40
Oct. 20, 1965	0930	61	7.13
Nov. 4, 1965	1115	56	4.70
Dec. 1, 1965	1300	36	4.60
Dec. 7, 1965	1515	38	4.80
Dec. 21, 1965	1540	38	6.31
Jan. 11, 1966	1520	34	14.5
Jan. 28, 1966	1105	34	2.60
Feb. 16, 1966	0900	32	17.6
Feb. 24, 1966	0900	36	11.2
Mar. 4, 1966	1300	38	14.8
Mar. 15, 1966	1430	47	115
Mar. 29, 1966	0740	36	34.8
Mar. 31, 1966	0740	48	26.0
Apr. 18, 1966	1350	55	19.5
May 3, 1966	1310	61	41.4
May 24, 1966	1300	63	527
June 1, 1966	1445	69	28.5
June 13, 1966	1905	65	3,280
June 28, 1966	1100	76	53.3
July 13, 1966	1500	90	.45
July 25, 1966	1620	81	3.30
July 26, 1966	0905	78	3.00
Aug. 11, 1966	1400	75	12.5
Aug. 23, 1966	0725	68	26.8
Sept. 7, 1966	1530	70	8.45
Sept. 27, 1966	0910	59	2.10
Oct. 11, 1966	0850	52	1.20
Oct. 18, 1966	0940	50	80.0
Nov. 3, 1966	1340	39	2.12
Nov. 14, 1966	1555	45	3.10
Dec. 12, 1966	1615	33	49.0
Jan. 10, 1967	1615	32	14.0
Jan. 11, 1967	0905	32	11.9
Feb. 7, 1967	1300	32	150
Feb. 10, 1967	0850	33	85.6
Mar. 1, 1967	0930	32	23.9
Mar. 6, 1967	1545	36	33.2
Apr. 4, 1967	1500	62	2,540
Apr. 25, 1967	1710	50	152
May 9, 1967	1400	57	1,110
June 6, 1967	0800	66	80.0
July 5, 1967	1200	68	40.0
Aug. 2, 1967	0920	81	38.0
Aug. 21, 1967	1640	69	57.0
Sept. 7, 1967	1250	72	1.29
Sept. 18, 1967	1630	73	2.50
Oct. 23, 1967	1600	59	11.0
Nov. 6, 1967	1500	41	318
Dec. 4, 1967	1650	38	85.5
Dec. 11, 1967	1520	35	178
Jan. 10, 1968	1500	34	15.0
Jan. 24, 1968	1120	38	97.0
Feb. 5, 1968	1440	40	292
Mar. 5, 1968	1700	38	21.0
Mar. 13, 1968	1240	38	28.2
Mar. 19, 1968	1815	44	163
Apr. 12, 1968	0915	59	31.0
Apr. 23, 1968	1605	54	200
May 10, 1968	0910	59	17.0
May 14, 1968	0930	65	15.8
June 20, 1968	1500	77	17.0
July 11, 1968	1500	78	.45
July 24, 1968	1315	79	1.20
Aug. 8, 1968	1500	77	100
Aug. 29, 1968	1445	77	2.23
Sept. 16, 1968	1730	67	1.50
Oct. 7, 1968	1255	53	3.40
Nov. 6, 1968	1300	60	9.90
Nov. 13, 1968	1435	42	17.0
Dec. 9, 1968	1430	35	35.5
Jan. 20, 1969	1345	34	852
Feb. 17, 1969	1300	35	95.0
Mar. 10, 1969	1320	34	100
Apr. 7, 1969	1520	59	1,590
May 5, 1969	1600	69	62.0
May 31, 1969	0945	69	43.4
June 16, 1969	1400	61	122
July 10, 1969	1935	80	3,070
Sept. 22, 1969	1505	67	5.30

LITTLE CHARITON RIVER BASIN

6-9064.7 Middle Fork Chariton River below Salisbury, Mo.

Location.--Lat 39°24'58", long 92°46'12", in NE¼NW¼ sec.12, T.53 N., R.17 W., at left downstream end of bridge on County Highway PP, 1 mile downstream from Muncas Creek, and 1½ mile east of Salisbury.

Drainage area.--201 sq mi.

Discharge records available.--October 1964 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 25, 1964	1150	67	3.92				
Nov. 17, 1964	0950	54	28.0				
Dec. 15, 1964	1315	33	40.2				
Jan. 1, 1965	0830	33	11.1				
Feb. 17, 1965	1115	34	35.7				
Mar. 11, 1965	1415	36	397				
Mar. 17, 1965	1545	39	1,650				
Apr. 1, 1965	0930	47	155				
Apr. 27, 1965	1500	56	27.9				
May 20, 1965	0845	68	1.53				
June 14, 1965	1800	74	11.0				
July 17, 1965	1145	77	302				
July 20, 1965	1410	78	128				
Aug. 25, 1965	0745	72	.81				
Sept. 17, 1965	1105	67	599				
Oct. 20, 1965	1340	58	11.6				
Dec. 1, 1965	0810	38	3.51				
Dec. 30, 1965	1545	44	24.6				
Jan. 28, 1966	1315	34	1.19				
Feb. 24, 1966	1230	36	.88				
Mar. 29, 1966	1315	36	7.10				
May 3, 1966	0650	56	6.91				
June 1, 1966	0715	62	2.80				
June 13, 1966	1700	70	4,030				
July 27, 1966	0905	76	1.51				
Aug. 23, 1966	0730	56	12.8				
Sept. 27, 1966	1020	61	.55				
Nov. 1, 1966	0820	48	.57				
Jan. 5, 1967	0820	34	1.81				
Feb. 3, 1967	0725	32	36.4				
Mar. 1, 1967	1710	37	5.30				
Mar. 7, 1967	0930	34	7.70				
Mar. 29, 1967	1100	46	33.6				
May 3, 1967	0810	55	176				
June 6, 1967	1350	68	63.3				
Aug. 2, 1967	1310	82	143				
Sept. 7, 1967	1700	72	14.2				
Oct. 4, 1967	0800	64	10.5				
Nov. 7, 1967	0815	46	369				
Feb. 22, 1968	1140	32	44.3				
Mar. 19, 1968	0940	50	68.4				
Apr. 23, 1968	0745	54	259				
May 14, 1968	0750	64	24.4				
June 27, 1968	1610	70	17.9				
July 24, 1968	1130	80	20.4				
Nov. 7, 1968	1205	44	34.0				
July 11, 1969	1050	80	2,160				
Aug. 14, 1969	0800	75	36.9				
Sept. 16, 1969	1100	68	23.6				

SLOUGH CREEK BASIN

6-9066. Burge Branch near Arrow Rock, Mo.

Location.--Lat 39°02'45", long 92°56'35", in SW¼NE¼ sec.1, T.49 N., R.19 W., on right bank 30 feet upstream from culvert on county road, 1½ miles south of Arrow Rock.

Drainage area.--0.33 sq mi.

Discharge records available.--October 1959 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 26, 1962	1410	34	10.3				
Feb. 8, 1962	2330	36	10.4				
Feb. 9, 1962	0120	36	10.4				
Mar. 20, 1962	0835	40	.40				
Mar. 21, 1962	0840	37	1.90				
May 4, 1963	0900	58	1.40				
May 4, 1963	2214	65	6.92				
Aug. 12, 1963	1005	75	1.00				
Apr. 7, 1964	0930	63	7.36				
July 2, 1964	2330	75	17.1				
Mar. 8, 1965	1530	37	.24				
Mar. 31, 1965	1030	44	.02				
June 10, 1965	1500	87	.08				
Sept. 23, 1965	1650	61	.01				
Oct. 21, 1965	1105	55	.10				
Mar. 1, 1966	0900	34	.03				
Jan. 8, 1966	1430	59	2.25				
Jan. 31, 1967	1645	35	.06				
Oct. 5, 1967	0900	68	.27				
Dec. 3, 1968	1745	39	.01				
Feb. 4, 1969	1730	33	.60				
Mar. 6, 1969	1015	39	.04				
May 13, 1969	1640	64	5.46				
July 8, 1969	1800	82	.16				

LAMINE RIVER BASIN

6-9067. Flat Creek near Sedalia, Mo.

Location.--Lat 38°39'35", long 93°15'10", in NW¼SE¼ sec.20, T.45 N., R.21 W., on downstream side of left pier of bridge on U. S. Highway 65, 1 mile upstream from Spring Fork, and 1½ miles south of Sedalia.

Drainage area.--148 sq mi.

Discharge records available.--October 1958 to September 1967 (discontinued).

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 15, 1960	1030	60	0.30				
July 29, 1963	1300	81	7.13				
Sept. 6, 1963	1130	76	1.04				
Oct. 17, 1963	1130	69	0				
Dec. 27, 1963	1130	33	.05				
Jan. 28, 1964	1230	41	.17				
Feb. 24, 1964	1235	42	.23				
Mar. 23, 1964	1100	46	10.3				
May 13, 1964	1100	64	6.43				
July 8, 1964	1245	83	2.30				
Sept. 19, 1964	1020	73	.67				
Dec. 14, 1964	1040	36	5.30				
Jan. 12, 1965	1500	38	5.30				
Feb. 16, 1965	1030	34	5.14				
Mar. 10, 1965	0950	36	575				
Mar. 30, 1965	1540	45	54.4				
Apr. 26, 1965	1400	60	17.6				
May 18, 1965	1615	75	1.30				
June 16, 1965	0715	72	31.2				
Sept. 29, 1965	0750	66	20.3				
Mar. 1, 1966	1535	42	77.3				
Mar. 30, 1966	1245	45	8.60				
May 5, 1966	1305	68	12.2				
June 9, 1966	1255	66	81.0				
June 29, 1966	1200	76	3.50				
Sept. 2, 1966	0750	75	.14				
Oct. 7, 1966	1320	65	.23				
Dec. 22, 1966	1310	40	.81				
March 6, 1967	1400	43	1.96				
Apr. 10, 1967	1145	66	5.60				

LAMINE RIVER BASIN

6-9070. Lamine River at Clifton City, Mo.

Location.--Lat 38°45'20", long 93°01'10", in NW¼ sec.16, T.46 N., R.19 W., at left end of county highway bridge, 300 feet upstream from Missouri-Kansas-Texas Railroad bridge, three-quarters of a mile east of Clifton City, 8 miles downstream from Otter Creek and at mile 39.3.

Drainage area.--598 sq mi.

Discharge records available.--June 1922 to September 1969.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 10, 1946	1500	52	1,930
Jan. 17, 1947	1530	37	170
Mar. 4, 1947	1325	35	34.8
Apr. 27, 1950	1620	54	89.1
Aug. 13, 1951	1115	80	183
Feb. 12, 1952	1330	43	287
Feb. 9, 1954	1700	45	11.3
Mar. 1, 1954	1510	43	16.1
Mar. 16, 1954	1245	45	12.7
Mar. 30, 1954	1445	46	19.0
May 11, 1963	1045	74	71.2
May 27, 1963	1010	67	1,540
June 14, 1963	1015	85	16.2
July 29, 1963	1045	77	364
Aug. 26, 1963	1100	84	11.8
Sept. 20, 1963	1115	74	6.18
Oct. 17, 1963	1315	69	.31
Dec. 27, 1963	1300	34	5.06
Feb. 24, 1964	1040	35	16.4
June 23, 1964	1000	79	144
Aug. 30, 1964	0945	80	2.96
Oct. 14, 1964	1015	55	1.33
Dec. 14, 1964	1250	36	55.1
Jan. 12, 1965	1620	40	48.0
Feb. 16, 1965	1200	38	74.5
Mar. 9, 1965	1630	37	659
Mar. 30, 1965	1330	46	446
Apr. 26, 1965	1145	63	129
May 19, 1965	0830	72	39.2
June 16, 1965	1130	72	159
Sept. 28, 1965	1635	65	257
Oct. 22, 1965	0830	46	291
Dec. 2, 1965	1535	42	39.4
Dec. 29, 1965	1020	45	280
Feb. 25, 1966	0945	36	25.5
May 5, 1966	1225	63	147
June 9, 1966	1330	54	1,140
June 29, 1966	0940	74	70.6
July 25, 1966	1445	85	7.24
Oct. 4, 1966	1330	64	6.70
Nov. 3, 1966	1520	42	13.0
Dec. 13, 1966	1030	35	31.7
Feb. 1, 1967	1645	35	202
Mar. 8, 1967	1335	38	48.2
Mar. 30, 1967	1405	49	97.8
May 4, 1967	1030	54	83.4
June 7, 1967	0945	69	10.4
July 7, 1967	1120	72	95.1
Aug. 3, 1967	0915	79	35.4
Sept. 13, 1967	1450	72	3.36
Oct. 5, 1967	1105	68	38.0
Nov. 9, 1967	1410	46	129
Dec. 7, 1967	1520	44	747
Jan. 11, 1968	1200	32	69.6
Feb. 21, 1968	1700	33	84.8
Mar. 27, 1968	1520	55	---
Apr. 17, 1968	0910	62	73.4
May 22, 1968	1545	61	34.4
July 1, 1968	1740	80	48.6
Aug. 30, 1968	1750	73	22.5
Sept. 26, 1968	1730	70	233
Oct. 16, 1968	1145	68	146
Nov. 13, 1968	0855	41	161
Dec. 5, 1968	1105	40	234
Jan. 23, 1969	1000	35	794
Feb. 5, 1969	1100	37	916
Apr. 24, 1969	1410	56	259
May 15, 1969	1450	68	123
June 5, 1969	1500	71	218
July 17, 1969	1020	83	155

LAMINE RIVER BASIN

6-9075. South Fork Blackwater River near Elm, Mo.

Location.--Lat 38°49'08", long 94°02'08", in SE¼SW¼ sec.5, T.46 N., R.28 W., on left bank at downstream side of bridge on county highway, 2½ miles southeast of Elm, and 3 miles upstream from mouth.

Drainage area.--16.6 sq mi.

Discharge records available.--June 1954 to September 1969. Prior to October 1, 1963 published as East Branch South Fork Blackwater River.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 25, 1961	1450	34	0.11
Feb. 20, 1961	1300	40	5.05
Mar. 1, 1961	1205	40	2.36
Mar. 10, 1961	1000	39	10.7
Mar. 20, 1961	1355	39	39.2
Apr. 4, 1961	1055	54	10.1
Apr. 11, 1961	1420	46	26.8
May 18, 1961	0910	58	10.1
June 6, 1961	1155	82	1.04
June 28, 1961	0930	74	.19
Aug. 17, 1961	1230	79	.07
Sept. 6, 1961	1005	74	2.78
Sept. 20, 1961	1715	66	2.69
Oct. 4, 1961	0740	54	1.98
Oct. 25, 1961	0910	53	2.97
Nov. 8, 1961	1230	44	6.52
Nov. 22, 1961	1115	45	61.2
Dec. 8, 1961	1430	40	6.25
Dec. 29, 1961	1200	35	3.44
Apr. 19, 1962	1525	67	1.66
May 8, 1962	0840	71	.73
May 23, 1962	1025	78	.02
Oct. 31, 1962	0940	48	.28
Dec. 12, 1962	1200	32	.02
Mar. 21, 1963	1050	48	.63
May 6, 1963	1630	72	2.62
Apr. 28, 1964	1535	61	10.2
May 12, 1964	1440	62	1.21
July 1, 1964	0755	74	1.41
Nov. 18, 1964	1435	48	2.94
Dec. 14, 1964	1600	38	1.31
Jan. 7, 1965	1550	50	3.42
Jan. 27, 1965	1555	37	10.9
Feb. 10, 1965	1055	36	10.7
Mar. 10, 1965	1325	40	44.3
Apr. 5, 1965	1530	61	28.8
Apr. 19, 1965	1415	66	3.01
June 16, 1965	1355	73	2.73
July 7, 1965	1345	86	.69
Aug. 9, 1965	1235	76	3.58
Sept. 30, 1965	1030	64	2.62
Nov. 3, 1965	1615	58	2.07
Nov. 16, 1965	1200	50	1.62
Dec. 20, 1965	1320	39	1.14
Jan. 20, 1966	1010	33	.84
Feb. 8, 1966	0925	34	10.5
Feb. 23, 1966	1430	34	1.11
Mar. 7, 1966	0900	34	1.02
May 6, 1966	0840	66	2.07
June 10, 1966	1430	64	8.75
Aug. 25, 1966	1445	77	1.02
July 20, 1966	1700	80	0
Sept. 20, 1966	1235	70	0
Jan. 24, 1967	0955	44	.90
Mar. 14, 1967	1355	42	.30
Mar. 22, 1967	1100	52	.72
Apr. 7, 1967	1615	44	2.74
Apr. 25, 1967	1020	45	3.10
May 11, 1967	1125	66	2.86
May 22, 1967	1115	59	.86
June 17, 1967	0950	70	20.7
June 27, 1967	1320	73	7.22
July 6, 1967	0900	64	1.98
Aug. 24, 1967	1655	74	2.41
Oct. 19, 1967	1605	56	.25
Nov. 16, 1967	1520	47	1.72
Jan. 16, 1968	1155	32	1.27
Feb. 14, 1968	1730	34	2.08
Mar. 12, 1968	1025	37	1.04
Apr. 11, 1968	1840	64	.71
May 1, 1968	1210	66	3.31
May 24, 1968	1010	57	28.6
July 18, 1968	1000	76	3.89
July 30, 1968	0955	70	5.51
Sept. 18, 1968	1020	57	.10
Oct. 24, 1968	1750	53	1.48
Dec. 17, 1968	1300	34	1.34
Jan. 7, 1969	1650	32	2.18
Feb. 6, 1969	1400	35	136
Feb. 18, 1969	1310	37	4.63
Feb. 28, 1969	1350	37	18.9
Apr. 2, 1969	1620	54	5.63
Apr. 18, 1969	1435	53	135
May 9, 1969	1415	62	3.54
June 12, 1969	1115	68	7.94
July 17, 1969	1800	86	1.73
Sept. 10, 1969	1120	68	1.02
Sept. 26, 1969	1455	71	.94

LAMINE RIVER BASIN

6-9077. Blackwater River at Valley City, Mo.

Location.--Lat 38°52'10", long 93°37'15", in SW¼NW¼ sec.13, T.47 N., R.25 W., on right bank at downstream side of bridge on County Highway E, 0.5 mile upstream from Blackjack Creek, 0.5 mile northwest of Valley City, and 1 mile downstream from Clear Creek.

Drainage area.--547 sq mi.

Discharge records available.--October 1958 to September 1969.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 10, 1961	0845	34	14.1
Feb. 21, 1961	1145	39	99.8
June 6, 1961	1515	82	39.0
Aug. 17, 1961	1400	82	19.1
Aug. 31, 1961	0830	80	9.82
Sept. 20, 1961	1545	68	114
Oct. 4, 1961	0925	59	89.0
Oct. 25, 1961	1215	56	124
Apr. 14, 1962	0705	47	124
June 20, 1962	1445	83	21.1
July 10, 1962	1600	80	3.86
Aug. 2, 1962	0700	70	1.07
Aug. 22, 1962	1035	82	5.48
Sept. 5, 1962	1300	74	4.55
Sept. 28, 1962	0800	59	11.3
Oct. 31, 1962	1130	53	22.6
Nov. 14, 1962	0840	45	5.35
Nov. 30, 1962	0815	44	6.35
Dec. 20, 1962	1245	38	17.0
Jan. 8, 1963	0755	33	13.5
Jan. 31, 1963	1100	32	3.17
Mar. 21, 1963	1245	48	58.6
Apr. 25, 1963	0700	56	4.75
May 7, 1963	0700	65	55.4
May 22, 1963	0950	65	16.2
June 10, 1963	1615	82	11.0
July 17, 1963	1730	91	12.3
July 25, 1963	0700	78	9.55
Aug. 7, 1963	1600	90	2.47
Aug. 29, 1963	0755	78	.95
Sept. 19, 1963	1015	75	.81
Oct. 30, 1963	1245	53	.61
Nov. 27, 1963	1400	43	1.61
Dec. 20, 1963	0950	34	.65
Jan. 23, 1964	1415	37	10.7
Feb. 3, 1964	1510	39	5.81
Feb. 17, 1964	1400	36	7.92
Mar. 10, 1964	1135	42	10.1
Mar. 27, 1964	1215	42	8.64
May 12, 1964	1250	66	60.4
June 2, 1964	1330	71	82.7
July 23, 1964	1120	86	5.35
Aug. 19, 1964	1600	85	1.29
Sept. 14, 1964	1430	75	5.49
Oct. 5, 1964	1630	58	.78
Nov. 5, 1964	1300	64	1.61
Nov. 18, 1964	1545	49	24.9
Dec. 15, 1964	1315	38	43.7
Jan. 7, 1965	1410	47	46.6
Jan. 27, 1965	1420	35	230
Feb. 10, 1965	1235	39	166
Mar. 24, 1965	1255	36	95.1
Apr. 19, 1965	1555	65	145
May 3, 1965	1635	72	41.8
July 7, 1965	1515	85	71.2
Aug. 9, 1965	1425	76	86.9
Sept. 30, 1965	1240	65	105
Nov. 16, 1965	1330	52	52.8
Dec. 6, 1965	1500	40	27.6
Dec. 20, 1965	1500	41	28.5
Jan. 20, 1966	1230	33	34.8
Feb. 8, 1966	1130	36	700
Feb. 17, 1966	1100	34	71.8
Feb. 25, 1966	1140	34	43.7
Mar. 7, 1966	1115	34	43.5
Mar. 24, 1966	1515	35	77.6
May 5, 1966	1600	68	72.4
July 20, 1966	1330	84	4.55
Aug. 2, 1966	1630	70	89.9
Sept. 20, 1966	1400	72	20.8
Oct. 18, 1966	1220	50	6.44
Nov. 3, 1966	0950	40	4.12
Dec. 5, 1966	1500	36	7.88
Jan. 11, 1967	1020	33	6.34
Feb. 13, 1967	1150	39	27.8
Feb. 24, 1967	1155	35	17.2
Mar. 14, 1967	1140	42	24.7
Mar. 22, 1967	1245	53	43.6
Apr. 7, 1967	1405	45	133
Apr. 25, 1967	1200	42	164
May 11, 1967	1550	68	113
May 22, 1967	1410	62	36.6
July 24, 1967	1525	88	12.2
Aug. 24, 1967	1440	79	5.79
Sept. 12, 1967	1635	75	2.23
Oct. 5, 1967	1315	68	7.34
Oct. 18, 1967	1450	58	47.7
Oct. 31, 1967	1750	55	8,030
Nov. 16, 1967	1240	43	59.3
Dec. 7, 1967	1105	38	277
Jan. 16, 1968	1500	32	58.6
Feb. 14, 1968	1530	32	108
Mar. 12, 1968	1430	44	36.5
Apr. 11, 1968	1615	68	48.2
May 1, 1968	1500	72	102
May 25, 1968	1805	59	12,400
July 9, 1968	1645	80	6.27
Aug. 6, 1968	1350	80	77.6
Aug. 23, 1968	1625	89	36.2
Sept. 18, 1968	1220	58	48.4
Sept. 25, 1968	1850	69	90.4
Oct. 3, 1968	1045	62	11.4
Oct. 16, 1968	1810	74	13.9
Dec. 17, 1968	1605	32	72.1
Jan. 7, 1969	1400	32	133
Feb. 6, 1969	1715	33	2,800
Feb. 18, 1969	1615	39	172
Feb. 28, 1969	1125	38	980
Mar. 24, 1969	1445	42	10,900
May 9, 1969	1700	64	360
July 11, 1969	1845	77	2,720
Aug. 14, 1969	1725	80	9.66
Sept. 11, 1969	1550	77	21.7
Sept. 26, 1969	1305	69	53.2

LAMINE RIVER BASIN

6-9080. Blackwater River at Blue Lick, Mo.

Location.--Lat 38°59'30", long 93°12'15", on line between secs.27 and 34, T.49 N., R.21 W., on right bank 25 ft upstream from bridge on old U. S. Highway 65, three-quarters of a mile downstream from Finney Creek, 1 mile south of Blue Lick, and at mile 30.8.

Drainage area.--1,120 sq mi, approximately.

Discharge records available.--June 1922 to September 1933, May 1938 to September 1969.

Maximum temperature measured.--95° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 10, 1946	0900	50	7.58
Dec. 30, 1946	0920	31	46.6
Apr. 27, 1950	1245	54	80.2
June 19, 1951	1520	73	167
May 23, 1963	1045	66	25.2
May 27, 1963	1340	67	2,910
July 26, 1963	1045	85	11.7
Aug. 31, 1963	1000	77	1.77
Sept. 20, 1963	1315	78	.25
Oct. 21, 1963	1230	73	.62
Nov. 19, 1963	1220	47	.54
Dec. 18, 1963	1100	33	1.48
Jan. 28, 1964	1400	34	14.6
Mar. 9, 1964	1030	40	22.1
May 20, 1964	1030	77	15.1
Aug. 17, 1964	1230	79	1.65
Sept. 14, 1964	0945	68	5.12
Oct. 12, 1964	1330	53	1.34
Nov. 12, 1964	1215	59	2.25
Dec. 14, 1964	1650	34	121
Jan. 13, 1965	1120	35	42.8
Feb. 16, 1965	1425	36	116
Mar. 10, 1965	1340	37	3,270
Mar. 30, 1965	1820	43	679
Apr. 26, 1965	1600	64	178
May 18, 1965	1240	72	20.4
June 9, 1965	1745	73	4,570
July 21, 1965	1830	74	20,700
Aug. 25, 1965	1220	72	1,460
Dec. 3, 1965	0950	41	45.8
Feb. 25, 1966	1230	36	64.9
Mar. 30, 1966	1515	42	100
May 4, 1966	1050	63	134
June 7, 1966	1245	64	258
June 29, 1966	1440	82	48.9
July 25, 1966	1115	83	5.75
Aug. 25, 1966	1330	76	74.2
Oct. 7, 1966	1115	58	8.67
Dec. 13, 1966	1400	36	15.3
Jan. 11, 1967	1620	33	9.37
Jan. 31, 1967	1440	34	344
Mar. 7, 1967	1110	38	97.0
Apr. 15, 1967	1645	65	3,350
May 4, 1967	1440	52	110
July 7, 1967	1120	73	167
Aug. 3, 1967	1305	81	418
Sept. 8, 1967	1415	74	4.69
Oct. 11, 1967	1600	54	109
Oct. 31, 1967	1300	47	3,650
Nov. 28, 1967	1205	41	104
Dec. 6, 1967	1310	43	1,660
Jan. 10, 1968	1645	32	72.6
Mar. 7, 1968	1440	67	87.7
Mar. 26, 1968	1720	51	159
Apr. 17, 1968	1225	60	470
July 2, 1968	1735	82	16.1
July 24, 1968	0930	80	40.6
Aug. 29, 1968	1635	77	26.4
Oct. 16, 1968	1510	68	22.9
Nov. 13, 1968	1245	42	153
Dec. 5, 1968	1700	38	214
Jan. 23, 1969	1345	34	853
Feb. 5, 1969	1530	38	1,710
Mar. 6, 1969	1620	42	307
Mar. 27, 1969	1615	48	4,960
May 15, 1969	1725	76	205
July 17, 1969	1245	95	240
Sept. 25, 1969	1745	70	146

MISSOURI RIVER MAIN STEM

6-9090. Missouri River at Boonville, Mo.

Location.--Lat 38°58'40", long 92°45'15", in sec.35, T.49 N., R.17 W., on downstream side of second pier from right abutment of Missouri-Kansas-Texas Co. bridge at Boonville. River mile 196.6.

Drainage area.--505,700 sq mi, approximately.

Discharge records available.--October 1925 to September 1969. Gage-height records collected at same site 1873-99 are contained in reports of Missouri River Commission; since 1900 in reports of U. S. Weather Bureau.

Temperature records available.--May 1953 to February 1959, October 1961 to April 1965, mean daily temperatures. Prior to May 1953, and from April 1965 to September 1969, occasional temperature observations.

Maximum daily temperature measured.--90° Fahrenheit.

Daily mean temperature (°F) of water, May to September 1953
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	DAY 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
May...........	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	66	66	66	68	71	73	73	72	72	74	75	—
June..........	75	76	76	77	77	77	76	76	78	79	81	81	79	78	78	80	80	81	82	82	81	81	81	80	80	78	78	78	78	78	—	79
July..........	78	79	79	80	81	81	80	80	80	79	79	78	78	79	79	79	78	79	81	82	82	83	83	83	83	83	85	86	87	87	88	81
August........	88	88	87	85	85	85	83	81	79	79	79	79	80	81	80	78	77	76	77	76	76	76	76	77	78	78	79	79	79	79	80	80
September.....	82	81	80	78	76	75	75	74	73	74	75	75	73	72	72	72	72	72	72	72	71	69	68	67	67	68	68	68	69	69	—	73

Daily mean temperature (°F) of water, water year October 1953 to September 1954
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	DAY 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	68	68	69	69	67	65	63	62	62	62	62	62	62	62	62	62	63	63	64	64	65	65	64	63	62	61	58	57	56	56	56	63
November......	56	55	56	55	53	51	49	48	47	47	46	46	46	46	47	48	49	50	51	53	51	50	48	48	47	45	44	43	42	42	—	49
December......	43	44	45	45	45	45	44	44	43	42	41	41	40	39	37	36	35	34	34	34	37	37	35	34	34	34	34	34	35	35	35	38
January.......	35	36	37	37	36	35	35	36	37	36	35	35	34	34	34	34	35	34	33	34	35	34	34	34	34	34	34	33	33	33	33	35
February......	33	34	36	38	39	40	39	36	37	38	39	38	37	38	40	43	44	44	45	45	44	44	43	42	42	42	42	41	—	—	—	40
March.........	41	41	39	38	37	38	39	40	41	41	42	43	44	42	41	41	42	43	43	43	43	43	44	44	46	48	49	49	48	45	43	43
April.........	43	44	45	45	46	50	55	57	56	56	56	57	57	59	60	59	59	61	61	62	62	61	60	62	64	67	67	66	65	65	—	58
May...........	65	65	63	59	57	57	56	55	56	57	58	60	61	63	65	66	67	67	67	67	67	68	69	70	71	69	70	70	70	70	71	64
June..........	70	68	66	65	65	67	69	70	71	74	78	79	79	79	80	79	81	82	83	83	83	83	84	84	83	83	84	85	85	86	—	78
July..........	86	86	87	87	88	88	88	87	85	84	83	84	85	87	87	85	85	86	87	88	88	88	87	85	85	85	84	84	84	85	85	85
August........	83	83	83	84	84	82	80	80	80	81	79	76	76	78	80	81	81	82	82	82	82	82	83	83	83	83	82	83	83	84	83	82
September.....	83	83	83	84	84	84	83	81	79	77	77	77	76	75	74	74	76	77	77	77	75	73	72	71	71	70	71	71	71	71	—	77

Daily mean temperature (°F) of water, water year October 1954 to September 1955
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	DAY 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	71	71	72	73	73	70	68	66	65	66	67	67	67	66	64	61	59	58	57	56	55	55	55	56	56	57	57	56	55	54	53	62
November......	52	49	47	46	45	45	45	47	48	49	50	51	52	52	52	53	53	53	53	52	52	52	51	49	46	45	45	46	45	43	—	49
December......	42	42	41	42	42	41	40	39	39	39	39	40	39	38	38	38	38	38	37	37	37	37	38	39	39	40	42	42	39	37	37	39
January.......	37	38	38	39	40	44	45	43	42	41	40	39	39	38	38	38	38	39	39	39	38	38	38	38	38	38	38	38	38	38	38	39
February......	38	38	38	38	38	38	38	38	38	39	38	38	37	37	36	36	36	37	38	39	38	37	37	37	38	39	39	39	—	—	—	38
March.........	39	39	41	43	44	42	38	38	40	43	47	49	49	48	48	47	46	44	44	45	45	41	41	42	42	39	38	39	41	43	45	43
April.........	48	49	51	52	54	55	55	58	57	58	59	60	61	62	62	62	63	64	65	67	67	68	69	67	65	65	66	66	67	67	—	61
May...........	67	68	70	72	73	75	74	72	71	70	69	68	67	65	66	67	68	70	72	73	74	74	75	76	75	74	75	74	71	70	70	71
June..........	70	70	72	75	76	76	75	74	74	73	70	69	69	70	71	73	74	75	75	77	78	79	79	79	75	75	74	73	75	78	—	74
July..........	79	81	81	83	84	83	83	84	85	85	87	87	85	84	84	85	85	84	84	84	86	86	87	87	87	88	89	89	89	89	90	85
August........	90	90	89	88	86	84	83	80	79	80	81	81	81	81	80	80	80	81	82	83	83	82	82	81	81	81	81	81	79	75	75	82
September.....	74	76	76	75	76	76	77	76	76	75	73	70	68	68	70	71	72	73	74	74	74	74	73	71	69	67	66	66	67	67	—	72

MISSOURI RIVER MAIN STEM

6-9090. Missouri River at Boonville, Mo.--Continued

Daily mean temperature (°F) of water, water year October 1955 to September 1956
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Aver age
October.......	65	64	63	63	63	64	64	63	61	61	61	62	61	60	58	57	56	55	54	54	55	55	55	54	52	52	52	53	51	49	47	58
November.......	48	47	46	45	45	45	44	42	41	41	42	43	43	44	43	43	38	37	36	35	37	39	41	40	39	39	a38	a37	a36	a35	—	41
December......	a34	33	33	34	34	34	34	35	34	34	34	34	34	34	34	34	34	34	34	34	34	33	33	33	33	34	35	36	38	36	35	34
January.......	35	35	35	35	36	37	36	35	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	33	33	33	34	34	34	34
February......	34	35	35	35	35	35	35	35	35	36	37	37	37	39	39	39	39	38	38	38	38	38	38	39	40	40	41	40	40	—	—	37
March..........	42	42	44	45	47	49	48	44	43	44	44	42	41	41	41	40	41	42	41	42	43	43	43	43	44	47	49	51	50	49	49	44
April..........	51	53	55	56	55	56	54	52	51	50	49	50	51	53	55	54	53	53	54	55	57	58	56	55	55	55	59	62	61	59	—	55
May............	58	58	59	60	60	61	62	61	61	64	67	71	74	75	74	73	72	73	74	74	74	75	76	75	74	73	75	75	76	77	78	70
June...........	76	76	76	76	77	77	78	79	81	82	82	82	82	82	82	82	82	82	83	84	85	86	87	87	87	86	85	84	84	84	—	82
July...........	85	85	83	81	80	82	82	82	81	80	80	80	81	82	83	84	84	84	83	83	82	81	81	80	82	84	85	86	85	84	83	83
August.........	84	84	84	82	83	83	83	83	82	82	81	81	81	81	81	82	83	84	82	79	77	77	76	76	76	77	77	78	79	78	78	80
September.....	77	77	76	76	75	74	72	71	70	69	68	69	70	71	71	72	72	72	71	70	69	69	69	69	69	70	70	70	69	68	—	71

a Estimated on basis of record for adjoining periods.

Daily mean temperature (°F) of water, water year October 1956 to September 1957
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Aver-age
October.......	67	67	67	67	66	65	64	62	61	60	59	60	60	61	62	62	63	64	64	64	64	64	64	63	62	60	59	58	57	58	58	62
November......	58	58	57	57	57	56	54	51	48	47	48	48	48	49	51	48	46	45	45	45	43	40	39	39	38	38	37	37	37	36	—	47
December......	36	37	38	38	40	41	40	38	35	34	34	34	33	33	33	33	34	34	34	35	35	36	37	37	36	36	36	37	37	37	37	36
January.......	38	37	36	36	36	36	35	35	35	34	33	33	33	33	33	33	33	33	33	32	32	36	34	33	33	34	33	33	33	33	33	34
February......	33	33	33	33	33	33	33	33	33	34	37	38	37	37	39	39	40	41	41	40	39	38	37	38	39	39	39	39	—	—	—	37
March..........	40	41	41	41	41	42	41	39	39	39	42	44	45	47	46	45	46	47	47	45	46	45	45	44	43	42	41	43	44	45	45	43
April..........	46	47	46	45	44	42	42	42	43	44	46	46	45	46	47	46	47	49	54	57	59	60	62	63	65	67	66	65	65	65	—	52
May............	66	66	66	63	62	63	64	65	66	67	67	67	67	67	67	66	63	62	61	61	63	65	65	65	66	67	67	67	68	69	70	65
June...........	70	70	69	70	71	73	75	76	76	76	75	75	75	75	76	77	78	78	77	76	74	74	75	74	74	74	74	74	74	73	—	74
July...........	73	75	76	78	79	79	80	81	81	81	80	81	81	82	83	84	85	87	87	87	86	85	83	82	82	81	81	80	82	83	34	82
August.........	85	84	84	83	81	80	78	78	78	79	79	80	81	82	82	82	79	78	78	77	75	75	75	74	74	75	76	75	76	76	77	79
September.....	77	76	76	76	75	74	73	72	72	71	70	69	69	69	69	69	69	68	69	69	67	65	64	64	64	65	64	63	62	63	—	69

Daily mean temperature (°F) of water, water year October 1957 to September 1958
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Aver-age
October.......	63	64	64	63	63	62	62	62	62	60	59	58	57	56	56	56	57	57	56	55	55	54	55	55	54	a52	a50	a49	a48	a47	46	57
November......	46	47	47	47	47	46	46	45	44	42	42	42	42	42	43	44	44	43	42	40	39	38	37	37	37	37	37	38	38	37	—	42
December......	36	36	36	35	35	37	39	38	37	37	34	32	32	32	33	34	35	35	36	38	39	39	39	39	39	39	38	37	37	36	35	36
January.......	33	32	32	a32	a32	a32	32	32	31	32	33	33	34	35	35	33	33	34	34	35	34	32	32	32	31	31	31	32	32	32	33	33
February......	32	32	32	32	31	32	32	32	32	32	32	32	32	32	a32	a32	32	a32	a32	a32	32	31	32	a33	34	35	33	37	—	—	—	32
March..........	38	37	36	36	36	36	37	37	36	36	36	36	36	37	37	37	37	37	37	38	38	39	39	39	39	40	42	43	44	44	44	38
April..........	45	45	46	49	51	52	51	50	49	49	48	49	50	51	51	52	54	56	57	58	59	59	59	59	58	58	57	56	56	55	—	53
May............	55	56	56	58	57	57	57	58	59	60	62	64	66	67	68	70	71	71	71	71	71	71	70	69	68	68	69	69	70	70	71	65
June...........	72	72	71	72	73	74	74	75	76	77	77	76	76	75	72	71	71	71	71	71	72	72	72	71	70	69	69	69	70	72	—	72
July...........	73	74	75	75	75	75	74	74	75	75	75	75	73	73	73	73	72	72	73	73	72	72	73	73	73	73	73	74	74	74	74	74
August.........	74	73	74	75	76	77	78	79	79	79	79	80	80	81	81	81	81	81	81	81	81	81	81	79	77	76	76	76	76	76	76	78
September......	76	76	76	76	77	77	77	77	77	76	76	75	75	75	75	74	72	71	71	71	71	71	71	71	71	71	70	70	70	69	—	74

a Estimated on basis of record for adjoining days.

MISSOURI RIVER MAIN STEM

6-9090. Missouri River at Boonville, Mo.—Continued

Daily mean temperature (°F) of water, October 1958 to February 1959
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	67	66	64	64	64	64	63	63	63	63	64	64	64	64	64	64	64	64	64	64	63	63	63	63	59	59	57	57	56	56	53	62
November......	53	53	53	53	53	53	52	51	51	51	51	51	51	51	52	52	53	54	54	53	51	50	49	49	49	47	44	42	41	39	—	50
December......	38	38	37	37	37	37	37	37	35	35	35	35	35	35	35	34	34	35	36	36	36	36	36	36	35	34	34	34	34	34	34	36
January.......	34	34	34	34	34	34	34	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	32	33
February......	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34	35	35	—	—	—	33

Daily mean temperature (°F) of water, water year October 1960 to September 1961
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	57	57	56	56	56	55	55	55	55	55	55	54	—
November......	52	50	49	49	49	49	47	47	47	45	44	43	43	45	47	48	47	47	46	46	45	45	45	43	43	43	44	46	44	42	—	46
December......	40	39	38	39	42	43	42	42	40	39	38	37	36	35	35	34	34	34	34	34	35	35	34	34	33	34	35	36	35	35	35	37
January.......	34	34	34	34	35	36	37	37	36	36	36	37	38	39	39	39	38	39	39	39	37	36	35	36	36	36	36	35	35	35	34	36
February......	35	35	35	35	35	35	35	35	35	35	35	34	35	37	35	37	39	42	41	40	39	39	39	40	39	39	40	40	—	—	—	37
March.........	40	41	41	43	44	45	44	43	41	40	40	41	43	43	43	44	44	44	43	43	42	42	41	42	43	44	48	49	49	48	48	43
April.........	48	48	48	47	48	48	49	50	47	43	44	44	45	46	48	48	47	46	47	51	53	56	58	59	62	62	61	60	60	59	—	51
May...........	58	57	58	58	57	56	57	57	58	59	61	62	65	66	66	65	64	63	62	62	62	62	62	62	62	63	63	65	66	67	69	62
June..........	71	72	72	73	74	75	75	75	76	77	78	79	79	78	76	74	73	73	74	74	75	75	75	75	75	75	75	76	77	78	—	75
July..........	78	79	80	81	82	80	79	78	77	78	78	69	69	69	69	78	78	78	78	80	82	81	78	77	77	76	77	79	81	82	84	79
August........	85	84	83	82	83	83	84	84	83	82	83	83	81	79	79	80	81	81	81	81	79	78	76	75	75	75	76	77	79	80	81	80
September.....	81	81	80	78	76	74	74	75	76	77	78	78	75	70	66	65	64	65	65	65	65	66	67	67	63	61	61	61	61	62	—	70

Daily mean temperature (°F) of water, water year October 1961 to September 1962
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	62	61	60	59	59	60	61	62	63	64	65	65	65	65	63	62	62	62	62	60	59	59	59	59	58	57	56	56	57	59	60	59
November......	60	60	59	57	54	51	49	48	46	46	46	47	48	49	49	49	48	46	44	43	42	42	43	43	44	45	45	45	44	44	—	48
December......	44	44	45	47	47	46	45	44	43	42	40	37	35	35	35	35	34	35	35	35	35	35	35	35	35	34	34	35	35	35	34	38
January.......	34	34	34	35	36	35	35	35	36	36	35	35	34	34	35	35	35	35	35	35	35	35	35	34	34	34	34	34	34	35	34	35
February......	34	34	34	35	36	35	35	34	35	35	35	36	37	38	38	39	39	38	38	37	37	36	36	35	35	36	36	35	—	—	—	36
March.........	35	34	34	34	35	35	35	36	37	37	37	37	36	37	36	37	37	38	40	41	42	43	43	43	44	45	44	44	45	45	45	39
April.........	45	43	42	42	43	43	44	46	47	48	48	48	47	47	48	49	49	50	52	53	55	56	58	60	61	62	64	65	65	66	—	52
May...........	65	64	64	65	66	67	68	69	69	69	71	72	72	72	72	73	73	74	75	75	76	76	75	75	74	74	74	74	73	72	69	71
June..........	68	68	68	68	69	70	70	70	70	71	72	72	72	73	74	75	76	77	78	79	79	79	79	79	78	78	79	80	80	81	—	74
July..........	81	81	82	83	83	82	82	82	82	82	83	83	83	82	82	81	80	80	80	80	80	80	80	79	78	78	78	77	78	78	78	80
August........	77	77	77	77	78	80	82	83	83	82	81	81	81	81	81	80	80	79	79	79	80	80	81	81	79	78	78	78	78	79	78	80
September.....	78	78	77	75	72	71	71	71	71	69	69	70	72	73	73	73	74	75	75	73	71	69	68	67	67	66	66	66	65	65	—	71

Daily mean temperature (°F) of water, water year October 1962 to September 1963
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	65	64	65	63	63	63	63	64	65	66	67	68	69	69	69	69	68	67	66	65	64	63	61	59	56	55	54	55	55	54	53	63
November......	53	52	51	51	50	49	48	48	47	47	46	46	46	46	46	47	47	47	47	46	45	45	45	44	43	43	43	44	44	44	—	47
December......	44	45	46	47	46	45	44	44	42	39	37	36	35	34	34	34	35	36	38	41	38	35	36	35	35	35	35	34	34	35	34	38
January.......	34	34	34	34	34	34	34	34	35	37	37	36	35	35	35	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	34	35
February......	33	33	34	33	33	34	34	34	34	34	35	35	34	34	34	34	34	35	35	37	37	35	34	34	34	35	34	35	—	—	—	34
March.........	35	37	38	38	37	37	37	37	37	38	39	40	41	40	39	40	41	42	42	43	43	43	44	45	47	49	51	51	52	53	54	42
April.........	56	58	58	57	58	57	58	59	59	58	55	55	55	56	57	57	59	61	61	61	61	62	61	60	59	59	58	56	57	57	—	58
May...........	57	57	58	59	60	62	63	65	67	70	71	70	71	72	73	71	67	66	65	66	66	66	66	65	65	63	63	64	65	67	69	65
June..........	70	72	73	75	77	77	78	79	80	80	80	80	82	83	81	78	78	78	78	77	77	76	76	77	79	80	81	79	80	82	—	78
July..........	83	85	85	85	85	85	85	84	83	82	80	78	77	77	77	78	79	80	81	81	81	80	81	81	81	81	80	80	79	80	80	81
August........	80	80	81	81	81	81	81	81	82	81	81	81	79	78	78	78	78	77	75	74	74	75	75	76	77	77	77	77	78	79	79	78
September.....	78	77	77	77	76	76	76	77	77	78	77	77	75	74	73	73	73	73	73	74	73	72	71	70	70	69	70	70	69	67	—	74

6-9090. Missouri River at Boonville, Mo.--Continued

Daily mean temperature (°F) of water, water year October 1963 to September 1964
(Recorder with temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October........	67	67	68	68	68	68	68	69	69	68	68	68	68	67	67	67	67	67	67	67	68	68	68	68	68	68	68	66	64	62	61	67
November.......	59	54	55	54	53	53	53	52	52	52	52	52	50	49	48	48	49	49	48	47	46	48	47	46	45	44	43	43	43	41	--	49
December.......	40	40	40	40	40	40	40	40	38	36	35	34	34	34	34	34	33	34	34	34	34	34	34	33	32	32	32	33	33	34	33	35
January........	33	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	32	32	33	34	36	39	40	38	37	36	34	33	34	35	34
February.......	36	36	38	39	40	40	39	37	38	37	37	37	37	37	37	37	37	38	38	38	38	37	38	36	37	37	37	37	38	--	--	38
March..........	38	39	41	43	41	41	42	42	41	40	40	41	42	45	46	47	48	46	46	45	43	43	44	45	44	40	40	40	40	40	40	42
April..........	41	44	45	45	44	44	45	45	45	46	48	50	52	52	52	54	56	57	57	57	58	59	60	59	60	60	61	60	58	58	--	52
May............	58	59	61	62	65	66	67	67	67	67	67	66	64	64	65	67	68	70	71	73	74	75	75	75	75	75	74	71	68	66	66	68
June...........	66	66	66	67	65	63	63	65	68	71	72	72	71	71	70	71	72	73	73	73	73	73	73	73	73	73	74	75	77	77	--	71
July...........	77	78	78	79	79	79	80	79	79	80	79	78	77	77	78	78	78	79	81	82	82	83	84	84	85	84	85	84	83	82	81	80
August.........	82	83	84	83	82	81	81	81	79	79	79	77	75	74	72	72	72	72	73	73	72	73	73	72	73	73	73	73	73	74	74	76
September......	73	73	74	75	75	75	75	73	73	73	73	72	71	71	71	71	70	69	69	70	70	70	69	67	66	65	64	63	62	62	--	70

Daily mean temperature (°F) of water, water year October 1964 to April 1965
(Recorder with mean temperature attachment, continuous ethyl alcohol-actuated thermograph)

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October........	40	63	63	62	61	60	59	58	57	55	54	54	53	54	55	55	56	56	55	55	55	55	55	54	54	53	53	54	54	54	54	55
November.......	54	55	56	57	57	57	57	56	56	55	55	56	55	55	55	56	55	53	50	47	43	41	39	39	39	39	39	39	38	35	—	50
December.......	34	34	33	33	33	33	32	32	32	32	33	33	34	34	34	34	34	33	32	32	32	32	33	35	36	35	33	32	32	33	33	33
January........	34	36	37	36	36	36	36	39	40	38	36	35	35	34	34	34	34	33	33	33	33	33	35	36	35	35	35	35	34	34	34	35
February.......	34	34	34	33	33	34	34	33	33	34	35	34	34	34	34	34	34	36	38	38	40	40	38	36	35	34	33	34	—	—	—	35
March..........	37	37	36	34	34	34	34	35	37	37	38	39	40	40	41	41	42	41	38	35	34	34	36	36	35	35	35	36	37	38	40	37
April..........	41	42	42	42	42	45	47	48	50	50	51	52	52	52	52	51	52	52	54	—	—	—	—	—	—	—	—	—	—	—	—	—

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
May 21, 1949	1010	70	59,400
July 21, 1949	1050	83	53,500
July 26, 1949	1100	82	56,000
July 31, 1949	0810	39	49,900
Sept. 9, 1949	0810	68	53,300
Sept. 15, 1949	1250	65	137,000
Sept. 24, 1949	1100	65	40,700
Oct. 10, 1949	0645	69	31,000
Oct. 15, 1949	0920	63	37,500
Oct. 21, 1949	1430	63	84,900
Oct. 26, 1949	1015	53	58,500
Oct. 31, 1949	0915	49	38,700
Nov. 28, 1949	0915	42	27,400
Dec. 7, 1949	0820	39	25,700
Dec. 24, 1949	1230	33	15,700
Jan. 8, 1950	1700	33	15,000
Jan. 26, 1950	1000	32	21,300
Feb. 14, 1950	0900	34	74,100
Mar. 29, 1951	1300	33	131,000
Apr. 19, 1952	0830	64	158,000
Apr. 22, 1965	0920	60	52,100
Apr. 28, 1965	0915	56	65,900
May 5, 1965	1335	68	43,200
May 10, 1965	1500	65	62,200
May 14, 1965	1350	71	57,300
May 25, 1965	1440	72	89,000
June 2, 1965	1215	71	69,900
June 25, 1965	1315	78	56,200
June 30, 1965	1700	80	143,000
July 2, 1965	1520	75	214,000
July 6, 1965	1545	77	119,000
July 16, 1965	1505	82	90,200
July 30, 1965	0735	81	70,100
Aug. 9, 1965	1510	79	51,300
Aug. 24, 1965	0745	78	44,600
Sept. 14, 1965	1140	73	64,700
Sept. 17, 1965	1330	69	108,000
Sept. 22, 1965	1835	69	226,000
Oct. 12, 1965	1455	59	64,200
Nov. 19, 1965	0810	45	51,200
Jan. 18, 1966	0800	33	31,700
Mar. 1, 1966	1000	35	39,400
Mar. 11, 1966	0900	37	27,900
Mar. 17, 1966	1300	50	41,200
Apr. 12, 1966	1100	40	45,900
Apr. 15, 1966	0950	48	47,000
Apr. 21, 1966	1000	42	56,100
May 10, 1966	0930	40	38,900
May 13, 1966	0930	50	46,500
May 17, 1966	1300	64	55,000
May 24, 1966	0920	51	53,700
May 27, 1966	0900	69	55,700
June 2, 1966	0720	68	39,900
June 9, 1966	1630	54	61,900
June 17, 1966	0700	70	92,600
June 27, 1966	1025	76	41,300
June 30, 1966	0530	73	65,700
July 15, 1966	0645	83	41,300
July 20, 1966	0700	76	44,500
July 26, 1966	0650	80	43,300
July 29, 1966	0730	79	43,000
Aug. 2, 1966	1010	72	46,500
Aug. 12, 1966	0720	75	44,200
Aug. 24, 1966	0715	56	59,100
Sept. 6, 1966	1115	74	44,300
Sept. 14, 1966	1055	73	39,200
Sept. 20, 1966	0730	64	43,000
Sept. 23, 1966	0730	69	38,600
Sept. 28, 1966	1255	66	40,400
Oct. 4, 1966	0700	55	39,500
Oct. 6, 1966	0930	63	39,100
Oct. 11, 1966	1320	66	37,000
Oct. 20, 1966	0930	54	46,700
Oct. 26, 1966	1230	52	40,200

6-9090. Missouri River at Boonville, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Temp. (°F)	Discharge (cfs)
Nov. 2, 1966	0740	48	40,800	Apr. 1, 1968	1625	48	42,400
Nov. 10, 1966	1250	46	38,900	Apr. 17, 1968	1600	60	58,700
Nov. 16, 1966	1150	46	40,300	Apr. 24, 1968	1245	52	106,000
Nov. 18, 1966	1145	44	38,700	May 2, 1968	0745	59	50,700
Nov. 28, 1966	1130	44	43,000	May 8, 1968	1150	61	45,800
Dec. 5, 1966	1030	38	25,300	May 13, 1968	1130	64	46,500
Dec. 9, 1966	1115	39	20,500	May 17, 1968	1235	64	47,800
Dec. 14, 1966	1255	41	22,400	May 22, 1968	1325	60	43,700
Dec. 22, 1966	1215	34	22,300	May 27, 1968	0900	59	81,900
Jan. 3, 1967	1310	34	12,500	May 31, 1968	1430	56	54,900
Jan. 13, 1967	1130	36	13,500	June 11, 1968	0840	63	41,000
Jan. 25, 1967	1410	34	19,900	June 14, 1968	0900	74	50,000
Feb. 1, 1967	1220	35	20,100	June 19, 1968	1440	76	49,700
Feb. 14, 1967	1000	54	20,500	July 1, 1968	1405	76	45,600
Feb. 21, 1967	0805	33	20,100	July 9, 1968	1055	78	39,600
Mar. 2, 1967	1445	44	15,400	July 12, 1968	0810	78	39,300
Mar. 14, 1967	1115	42	19,400	July 15, 1968	1325	78	39,200
Mar. 21, 1967	0730	47	20,600	July 22, 1968	1535	89	49,400
Mar. 31, 1967	1345	36	44,900	July 26, 1968	1145	80	69,300
Apr. 3, 1967	1450	56	12,400	Aug. 1, 1968	1135	77	52,100
Apr. 10, 1967	1045	43	64,700	Aug. 5, 1968	1325	76	118,000
Apr. 15, 1967	1230	59	126,000	Aug. 16, 1968	0810	78	57,900
Apr. 19, 1967	0815	43	61,100	Aug. 23, 1968	1120	86	48,400
Apr. 24, 1967	1240	49	53,400	Aug. 26, 1968	1525	81	50,500
Apr. 28, 1967	1405	56	48,000	Aug. 30, 1968	1120	77	42,100
May 2, 1967	0700	55	42,300	Sept. 3, 1968	1515	74	42,700
May 9, 1967	1530	56	68,500	Sept. 9, 1968	1505	68	45,000
May 12, 1967	1340	56	47,200	Sept. 16, 1968	1330	73	35,800
May 17, 1967	0720	56	44,700	Oct. 1, 1968	0800	70	39,200
May 22, 1967	1020	62	39,900	Oct. 8, 1968	1210	63	43,700
May 26, 1967	1010	71	37,600	Oct. 14, 1968	1200	63	47,300
June 1, 1967	0730	53	106,000	Oct. 17, 1968	0750	64	40,300
June 8, 1967	0810	69	134,000	Oct. 24, 1968	1130	50	59,800
June 14, 1967	1010	70	246,000	Nov. 4, 1968	1005	51	45,600
June 16, 1967	1355	73	249,000	Nov. 12, 1968	1110	43	50,900
June 18, 1967	0920	74	260,000	Nov. 19, 1968	1320	39	55,200
June 20, 1967	1245	74	253,000	Nov. 21, 1968	1020	—	51,200
June 23, 1967	0755	73	269,000	Nov. 25, 1968	1250	42	47,900
June 26, 1967	1225	70	269,000	Dec. 4, 1968	0915	38	48,800
June 29, 1967	1300	70	242,000	Dec. 9, 1968	1325	36	44,100
July 5, 1967	1500	72	94,700	Dec. 12, 1968	0755	40	33,000
July 13, 1967	1505	76	76,900	Dec. 16, 1968	1130	36	26,400
July 18, 1967	0915	72	57,200	Jan. 14, 1969	1045	34	21,200
July 21, 1967	0745	78	56,800	Jan. 22, 1969	1145	36	51,800
July 26, 1967	1120	82	57,400	Feb. 4, 1969	0730	34	33,600
Aug. 1, 1967	0900	80	66,200	Feb. 10, 1969	1135	36	84,600
Aug. 4, 1967	0800	78	57,800	Feb. 1 , 1969	0925	34	44,300
Aug. 9, 1967	0730	78	57,000	Feb. 24, 1969	1340	37	43,400
Aug. 16, 1967	1735	78	46,100	Mar. 3, 1969	0910	34	82,500
Aug. 23, 1967	0800	76	44,900	Mar. 17, 1969	1105	40	49,000
Sept. 1, 1967	1300	72	42,400	Mar. 21, 1969	1200	40	103,000
Sept. 8, 1967	1100	72	42,800	Mar. 24, 1969	1345	—	96,100
Sept. 14, 1967	0930	70	43,200	Mar. 28, 1969	0710	42	126,000
Sept. 22, 1967	0920	72	61,900	Apr. 2, 1969	0710	42	86,000
Sept. 29, 1967	0745	58	53,600	Apr. 9, 1969	0715	49	137,000
Oct. 3, 1967	0745	69	46,300	Apr. 16, 1969	0655	56	120,000
Oct. 16, 1967	0730	62	56,900	Apr. 22, 1969	0710	57	138,000
Oct. 18, 1967	1140	56	80,600	Apr. 25, 1969	0800	58	94,700
Oct. 24, 1967	1110	56	47,900	Apr. 30, 1969	0710	56	192,000
Nov. 2, 1967	0805	47	101,000	May 8, 1969	0905	64	93,600
Nov. 9, 1967	1010	46	53,700	May 13, 1969	0845	62	102,000
Nov. 14, 1967	0905	47	47,700	May 16, 1969	0740	65	78,300
Nov. 17, 1967	1215	46	47,000	May 20, 1969	1015	66	82,400
Nov. 20, 1967	1435	44	46,200	May 23, 1969	1100	68	142,000
Nov. 21, 1967	0950	45	45,600	May 28, 1969	0810	68	92,600
Nov. 28, 1967	1230	40	44,200	June 3, 1969	0830	69	110,000
Dec. 5, 1967	1040	38	35,700	June 6, 1969	0755	68	85,800
Dec. 15, 1967	1245	34	33,600	June 11, 1969	0845	71	63,100
Dec. 21, 1967	1335	36	38,000	June 18, 1969	0855	67	67,800
Dec. 27, 1967	1300	38	27,900	June 24, 1969	1415	—	164,000
Jan. 11, 1968	0805	32	——	July 2, 1969	0750	76	193,000
Jan. 30, 1968	1400	39	43,200	July 9, 1969	0815	79	196,000
Feb. 9, 1968	1335	35	32,000	July 16, 1969	0645	81	139,000
Feb. 21, 1968	1145	32	30,000	July 24, 1969	0710	83	84,300
Feb. 26, 1968	1035	34	29,700	July 30, 1969	0920	81	81,600
Mar. 7, 1968	1025	39	34,000	Aug. 6, 1969	1140	79	70,900
Mar. 28, 1968	1100	50	38,900	Aug. 13, 1969	1020	79	68,300
Mar. 30, 1968	1210	46	30,600	Aug. 18, 1969	1045	82	82,800

MISSOURI RIVER MAIN STEM

6-9090. Missouri River at Boonville, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 28, 1969	0750	81	64,000				
Sept. 3, 1969	1000	76	64,300				
Sept. 9, 1969	0730	75	115,000				
Sept. 12, 1969	1045	79	82,600				
Sept. 17, 1969	0800	68	88,800				
Sept. 25, 1969	0815	70	87,000				

MONITEAU CREEK BASIN

6-9095. Moniteau Creek near Fayette, Mo.

Location.—Lat 39°07'15", long 92°33'40", in SE¼SE¼ sec.14, T.50 N., R.15 W., on right bank upstream side at county highway bridge, 1 mile downstream from Hungry Mother Creek, 7½ miles east of Fayette, and 15 miles upstream from mouth.

Drainage area.—81 sq mi, approximately.

Discharge records available.—March 1948 to September 1969 (fragmentary 1961 water year), (discontinued).

Maximum temperature measured.—80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 15, 1949	1640	34	77.9				
July 8, 1949	1145	76	5.88				
Jan. 26, 1950	1500	33	17.3				
Apr. 27, 1950	0715	50	7.22				
Feb. 11, 1952	1345	44	20.7				
Nov. 19, 1952	1330	52	1.00				
Aug. 21, 1963	1045	68	3.31				
Mar. 25, 1964	1030	43	.85				
Apr. 7, 1964	0915	47	61.5				
June 15, 1964	1200	75	12.4				
Nov. 17, 1964	1400	55	12.8				
Dec. 15, 1964	1525	33	4.82				
Jan. 14, 1965	1125	33	.94				
Feb. 17, 1965	1510	38	4.03				
Mar. 12, 1965	0930	35	155				
Mar. 17, 1965	1240	44	1,570				
Apr. 1, 1965	1605	50	26.4				
Apr. 28, 1965	0820	50	11.5				
May 20, 1965	1830	75	.44				
June 16, 1965	1640	72	2.72				
July 20, 1965	0905	70	416				
Aug. 24, 1965	1150	69	.10				
Oct. 19, 1965	1630	58	18.4				
Dec. 1, 1965	1630	36	2.29				
Dec. 29, 1965	1355	40	19.6				
Jan. 28, 1966	1650	33	1.48				
Feb. 24, 1966	1420	36	6.59				
Mar. 29, 1966	1600	38	10.0				
May 3, 1966	1525	63	12.8				
May 24, 1966	0910	56	41.0				
June 2, 1966	1245	63	2.96				
July 26, 1966	1320	80	1.08				
Sept. 28, 1966	1140	70	0				
Feb. 7, 1967	1635	32	18.3				
Mar. 7, 1967	1755	34	22.2				
Mar. 29, 1967	1530	56	33.5				
May 2, 1967	1520	56	31.9				
June 7, 1967	1550	68	6.72				
July 5, 1967	1750	66	11.3				
Aug. 1, 1967	1620	80	2.12				
Sept. 7, 1967	1850	74	.06				
Nov. 2, 1967	1515	48	36.9				
Jan. 11, 1968	0945	34	5.76				
Feb. 22, 1968	0800	32	5.63				
Mar. 21, 1968	0925	35	35.7				
May 13, 1968	1530	66	2.95				
June 26, 1968	1100	39	23.9				
Dec. 26, 1968	1115	33	5.38				
Mar. 14, 1969	1620	35	37.9				
May 20, 1969	0950	63	6.53				
June 6, 1969	1400	69	89.4				
July 11, 1969	1300	75	341				
Aug. 13, 1969	1550	75	1.89				
Sept. 16, 1969	1500	67	8.39				

PETITE SALINE CREEK BASIN

6-9097. Petite Saline Tributary near Bellair, Mo.

Location.--Lat 38°50'34", long 92°50'31", in SW¼NE¼ sec.13, T.47 N., R.18 W., on right bank just upstream from culvert under State Highway 5, at junction of highways 5 and F, one-half mile north of Bellair.

Drainage area.--0.49 sq mi.

Discharge records available.--Discharge measurements and gage-height record available April 1964 to September 1969. Discharge measurements only November 1954 to March 1964.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 10, 1966	0855	40	0.26				
July 25, 1966	1655	84	.02				
Feb. 2, 1967	0820	34	.17				
Nov. 9, 1967	1230	50	.04				
Dec. 21, 1967	1505	40	.20				
Jan. 11, 1968	0940	32	.01				
Feb. 21, 1968	1500	33	.02				
Mar. 27, 1968	1810	51	.02				
Apr. 17, 1968	0715	54	.09				
July 1, 1968	1555	71	.05				
Aug. 1, 1968	1535	66	.03				
Sept. 26, 1968	1515	64	.11				
Oct. 16, 1968	0850	65	.16				
Dec. 5, 1968	0830	37	.11				
Feb. 5, 1969	0810	34	.36				
Mar. 6, 1969	0850	41	.12				
May 13, 1969	1515	59	.86				
July 9, 1969	1610	77	.23				

PETITE SALINE CREEK BASIN

6-9100. Petite Saline Creek near Boonville, Mo.

Location.--Lat 38°55'00", long 92°39'20", in SW¼SE¼ sec.15, T.48 N., R.16 W., on right bank 50 ft upstream from county highway bridge, half a mile downstream from Clarks Fork Creek, 7 miles southeast of Boonville, and 14½ miles upstream from mouth.

Drainage area.--182 sq mi.

Discharge records available.--March 1948 to September 1967, (discontinued).

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 20, 1950	1100	32	41.4				
Aug. 13, 1951	1625	79	7.15				
July 26, 1952	0820	79	.97				
June 4, 1963	1300	77	8.23				
July 1, 1963	0945	81	20.7				
Aug. 20, 1963	0945	67	13.1				
Sept. 26, 1963	1000	65	.44				
Oct. 26, 1963	1020	65	.08				
Dec. 30, 1963	1100	34	.03				
Feb. 14, 1964	1100	39	.61				
Mar. 25, 1964	1430	36	105				
June 1, 1964	1015	66	27.1				
July 8, 1964	0920	77	6.81				
Aug. 18, 1964	1030	78	.21				
Sept. 18, 1964	0915	70	.19				
Nov. 3, 1964	0930	58	.04				
Jan. 12, 1965	1730	36	1.80				
Feb. 1, 1965	1505	34	6.69				
Mar. 8, 1965	1420	38	40.7				
Mar. 30, 1965	0800	41	140				
Apr. 9, 1965	1025	57	101				
Apr. 22, 1965	1430	70	39.4				
May 19, 1965	1110	66	8.66				
June 15, 1965	1430	72	60.8				
July 27, 1965	1000	75	16.4				
Aug. 26, 1965	1100	73	51.5				
Sept. 28, 1965	0955	60	41.0				
Dec. 2, 1965	1255	38	8.68				
Dec. 29, 1965	1255	41	43.3				
Feb. 24, 1966	1630	34	22.3				
Mar. 30, 1966	0745	34	15.6				
May 5, 1966	1015	63	33.6				
June 7, 1966	1550	65	22.4				
June 30, 1966	1030	80	4.57				
July 26, 1966	1105	78	12.4				
Oct. 7, 1966	0825	58	.08				
Nov. 2, 1966	1400	43	.35				
Dec. 14, 1966	1015	39	4.32				
Feb. 2, 1967	0925	35	127				
Mar. 8, 1967	1020	34	23.7				
Mar. 30, 1967	1120	50	28.9				
May 2, 1967	1310	50	25.3				
Aug. 4, 1967	1405	78	10.8				
Aug. 30, 1967	1645	79	.13				
Sept. 13, 1967	1720	71	.04				
Oct. 5, 1967	1520	66	34.9				

PERCHE CREEK BASIN

6-9102.3 Hinkson Creek at Columbia, Mo.

Location.--Lat 38°55'42", long 92°20'26", in NE¼NW¼SW¼ sec.24, T.48 N., R.13 W., on left bank 400 feet downstream from bridge on County Highway K, 0.5 mile south of Columbia, and 1 mile upstream from Flat Branch.

Drainage area.--70.2 sq mi.

Discharge records available.--October 1966 to September 1969.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 17, 1959	1320	62	1.97				
Nov. 15, 1962	0725	48	.16				
Oct. 2, 1963	1615	74	0				
Nov. 8, 1966	1345	54	.62				
Dec. 13, 1966	1320	57	.81				
Jan. 11, 1967	1245	36	.58				
Feb. 10, 1967	1310	40	3.83				
Mar. 1, 1967	1230	41	2.01				
Mar. 6, 1967	1105	35	43.2				
Apr. 13, 1967	1130	61	14.0				
May 10, 1967	1600	62	18.6				
June 15, 1967	1005	78	3.96				
July 20, 1967	1500	79	1.17				
Aug. 30, 1967	1230	73	.04				
Oct. 4, 1967	0930	66	.02				
Nov. 8, 1967	1120	39	4.90				
Feb. 28, 1968	0845	35	5.86				
Apr. 3, 1968	1705	55	92.0				
June 11, 1968	1430	81	6.06				
Aug. 19, 1968	1435	81	3.47				
Oct. 3, 1968	1320	62	2.06				
Feb. 25, 1969	0920	37	52.9				
Mar. 17, 1969	1640	42	77.0				
May 9, 1969	1325	59	66.7				
June 13, 1969	1045	68	10.6				
Aug. 18, 1969	1725	80	4.95				

CEDAR CREEK BASIN

6-9104.1 Cedar Creek near Columbia, Mo.

Location.—Lat 38°57'15", long 92°08'55", in NW¼SW¼ sec.10, T.48 N., R.11 W., on downstream side of right pier of bridge on access road to Interstate Highway 70, 1 mile downstream from Manacle Creek, and 9½ miles east of Columbia.

Drainage area.—44.8 sq mi.

Discharge records available.—June 1964 to September 1969.

Maximum temperature measured.—87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
July 8, 1964	1630	80	0.80
Aug. 12, 1964	0830	66	.10
Sept. 9, 1964	1500	79	0
Sept. 17, 1964	1410	67	2.25
Oct. 7, 1964	1430	57	0
Nov. 5, 1964	—	57	.10
Dec. 1, 1964	1130	32	.10
Jan. 14, 1965	1345	33	.25
Jan. 27, 1965	1015	32	6.90
Feb. 18, 1965	1545	43	1.50
Mar. 12, 1965	1330	41	67.4
Mar. 17, 1965	1515	45	783
Apr. 2, 1965	1135	46	9.30
Apr. 9, 1965	1245	56	13.9
Apr. 13, 1965	1830	59	22.0
Apr. 15, 1965	1055	55	144
Apr. 23, 1965	1450	75	4.00
May 13, 1965	—	77	.90
May 17, 1965	1230	65	.56
June 14, 1965	1440	72	3.10
June 16, 1965	1400	76	1.20
July 14, 1965	1105	76	9.40
July 16, 1965	1035	76	1.80
Aug. 10, 1965	1915	78	.80
Aug. 17, 1965	1410	86	0
Aug. 26, 1965	1400	83	.74
Sept. 8, 1965	0830	74	2.90
Sept. 13, 1965	1550	78	.33
Oct. 6, 1965	1145	52	.70
Oct. 11, 1965	1445	59	.37
Nov. 4, 1965	1500	55	.40
Nov. 8, 1965	1445	60	.31
Dec. 8, 1965	0930	39	.30
Dec. 22, 1965	1100	37	.77
Jan. 12, 1966	1040	39	.80
Feb. 15, 1966	1555	37	12.0
Feb. 16, 1966	1600	37	9.40
Mar. 1, 1966	1500	41	22.9
Mar. 14, 1966	1645	51	6.90
Mar. 29, 1966	1235	49	1.81
Mar. 30, 1966	1530	52	.90
Mar. 31, 1966	1530	52	1.20
Apr. 19, 1966	0950	56	23.0
May 5, 1966	0805	61	5.20
May 24, 1966	1720	66	6.50
May 25, 1966	0635	62	5.00
June 3, 1966	0710	64	.77
June 27, 1966	1415	78	1.40
July 13, 1966	1245	87	.05
July 26, 1966	1440	76	10.0
Aug. 11, 1966	1640	79	.45
Aug. 23, 1966	1625	72	.06
Aug. 24, 1966	0850	64	.10
Sept. 7, 1966	1325	69	.05
Sept. 27, 1966	1245	60	.05
Oct. 11, 1966	1100	54	.14
Oct. 18, 1966	1350	48	.51
Oct. 19, 1966	1320	49	0
Nov. 15, 1966	1230	45	.09
Dec. 13, 1966	1500	37	.55
Jan. 11, 1967	1440	35	.18
Feb. 2, 1967	1250	35	9.40
Feb. 9, 1967	1630	37	.76
Mar. 2, 1967	1550	48	.32
Mar. 7, 1967	1230	35	1.60
Apr. 3, 1967	1300	56	54.7
Apr. 14, 1967	—	62	41.0
Apr. 25, 1967	0915	48	4.98
May 9, 1967	1745	60	17.0
May 10, 1967	1400	62	9.50
May 23, 1967	0840	54	.78
June 7, 1967	1300	71	1.70
June 15, 1967	1720	84	1.70
July 6, 1967	0910	64	3.90
July 20, 1967	1450	72	1.80
Aug. 1, 1967	1400	80	1.10
Aug. 21, 1967	1315	67	.05
Aug. 30, 1967	0950	66	.04
Sept. 14, 1967	1250	72	.11
Sept. 18, 1967	1320	68	.04
Oct. 4, 1967	1140	68	.02
Oct. 23, 1967	1300	56	.36
Nov. 6, 1967	1300	40	4.00
Dec. 5, 1967	1355	38	70.0
Dec. 12, 1967	1600	39	21.0
Jan. 10, 1968	1030	34	.70
Jan. 24, 1968	1330	36	5.30
Feb. 5, 1968	1200	40	19.0
Feb. 28, 1968	1140	35	1.40
Mar. 5, 1968	0915	37	1.40
Mar. 25, 1968	1355	52	3.30
Apr. 3, 1968	1400	54	16.1
Apr. 12, 1968	1400	63	1.60
May 10, 1968	1415	61	1.10
June 11, 1968	1050	77	1.24
June 20, 1968	1715	78	.75
July 11, 1968	1720	77	1.50
Aug. 2, 1968	1300	74	1.50
Aug. 9, 1968	1015	74	6.20
Sept. 16, 1968	1500	65	.45
Oct. 3, 1968	1135	60	.57
Nov. 18, 1968	1150	42	0
Dec. 9, 1968	1100	33	3.80
Jan. 20, 1969	1100	34	22.0
Jan. 24, 1969	1000	32	121
Feb. 17, 1969	1000	35	8.70
Mar. 10, 1969	1010	34	9.30
Apr. 7, 1969	1200	56	46.0
May 5, 1969	1145	65	36.0
May 28, 1969	1405	73	5.11
June 16, 1969	1100	59	43.0
July 22, 1969	1310	77	3.90
Aug. 19, 1969	1030	74	1.50
Sept. 22, 1969	1230	65	1.60

MOREAU RIVER BASIN

6-9105. Moreau River near Jefferson City, Mo.

Location.--Lat 38°31'44", long 92°11'31", SE¼NW¼SE¼ sec.25, T.44 N., R.11 W., on downstream side of right pier of bridge on Tanner Bridge Road, 3 miles south of Jefferson City, 15-3/4 miles downstream from confluence of North and South Moreau Creeks, and at mile 17.

Drainage area.--561 sq mi.

Discharge records available.--December 1947 to September 1969 (discharge measurements only October 1956 to September 1957).

Maximum temperature measured.--91° Fahrenheit.

Remarks.--Includes temperature collected on U.S. Highway 54.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 28, 1948	1715	52	3,100
Apr. 5, 1949	0935	43	306
Apr. 29, 1949	1045	66	131
July 18, 1949	1135	76	123
Nov. 22, 1949	1445	43	51.2
Apr. 20, 1950	1100	57	250
June 23, 1950	1035	79	131
Sept. 19, 1950	0935	70	29.3
Oct. 26, 1950	1220	70	14.6
Dec. 11, 1950	1425	35	34.1
Mar. 1, 1951	1610	49	318
July 8, 1952	1400	82	6.57
Aug. 6, 1952	1215	79	20.9
Sept. 9, 1952	0805	69	14.8
Oct. 23, 1952	0810	65	1.61
Apr. 23, 1953	0945	57	102
June 16, 1953	0815	68	20.3
July 28, 1953	1120	87	5.92
Aug. 31, 1953	1025	84	.52
Sept. 28, 1953	1130	72	.69
Feb. 10, 1954	0815	42	7.57
Mar. 11, 1954	1210	48	12.0
Feb. 13, 1961	1335	43	46.7
May 2, 1961	1045	53	196
June 6, 1961	1115	78	56.3
Aug. 14, 1961	1410	74	30.2
Sept. 18 1961	1400	70	116
Nov. 28, 1961	1300	44	138
Feb. 13, 1962	1445	48	299
July 10, 1962	1320	81	15.9
Sept. 10, 1962	1630	70	50.6
Oct. 17, 1962	0850	67	12.1
Nov. 26, 1962	1510	45	7.34
Apr. 15, 1963	1750	59	26.1
May 21, 1963	0900	66	102
June 24, 1963	1630	77	36.0
June 25, 1963	0730	75	29.7
Sept. 5, 1963	1700	73	193
Oct. 7, 1963	1440	70	.90
Dec. 19, 1963	1300	35	3.43
May 4, 1964	1450	73	114
June 9, 1964	1500	73	224
July 21, 1964	1620	76	15.9
Aug. 28, 1964	1320	76	2.20
Oct. 5, 1964	1640	62	1.56
Nov. 24, 1964	0835	38	15.8
Dec. 16, 1964	1540	39	18.5
Jan. 15, 1965	1700	34	40.7
Feb. 15, 1965	1345	37	79.1
Mar. 8, 1965	1610	39	224
Apr. 6, 1965	1400	63	11,100
June 3, 1965	1605	71	5,910
June 25, 1965	1030	76	146
July 28, 1965	0905	74	194
Oct. 6, 1965	1320	59	90.8
Oct. 29, 1965	1400	54	129
Dec. 7, 1965	1420	40	39.4
Jan. 10, 1966	1125	38	157
Feb. 15, 1966	1750	39	305
Mar. 22, 1966	1150	59	105
Apr. 28, 1966	1215	63	895
June 7, 1966	1235	70	68.7
July 13, 1966	1455	91	9.73
Aug. 22, 1966	1245	81	9.78
Sept. 27, 1966	1420	64	2,69
Nov. 1, 1966	1000	49	1.63
Dec. 14, 1966	1545	37	26.3
Jan. 23, 1967	1545	42	11.2
Feb. 28, 1967	1510	37	10.3
Apr. 14, 1967	1145	64	106
May 11, 1967	1115	66	105
July 18, 1967	1205	77	24.9
Aug. 31, 1967	1020	68	7.62
Oct. 3, 1967	1435	70	4.59
Nov. 8, 1967	1620	42	109
Nov. 27, 1967	1610	44	40.9
Jan. 11, 1968	0905	32	70.4
Feb. 27, 1968	1225	35	64.2
Apr. 4, 1968	1040	53	1,290
Apr. 12, 1968	0810	59	83.6
July 8, 1968	1235	78	31.5
Sept. 3, 1968	1730	75	8.03
Oct. 14, 1968	1635	64	3,900
Dec. 17, 1968	1145	35	101
Mar. 11, 1969	0940	36	323
May 7, 1969	1250	71	144
June 25, 1969	1120	69	4,570
July 23, 1969	0850	80	93.5
Sept. 23, 1969	1130	70	159

OSAGE RIVER BASIN

6-9166.5 Osage River at Rich Hill, Mo.

Location.--On line between sec.28 and 29, T.39 N., R.31 W., at bridge on U. S. Highway 71, 2 miles north of Rich Hill, Bates County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 22, 1962	1535	89	47.9				
Sept. 4, 1963	1230	81	6.54				
Oct. 3, 1963	1300	70	4.75				
Nov. 6, 1963	--	57	.10				
Oct. 22, 1964	1610	56	7.59				
Apr. 6, 1965	1445	49	10,700				
Oct. 11, 1966	1030	64	31.5				
June 13, 1967	1815	69	14,100				
Sept. 7, 1967	1100	73	48.2				
Sept. 25, 1968	1445	70	1,400				

OSAGE RIVER BASIN

6-9180.6 Marmaton River near Nevada, Mo.

Location.—SW¼ sec.8, T.36 N., R.31 W., at Eaton bridge on county highway, 1 mile southwest of U. S. Highway 71, and 4 miles north of Nevada, Vernon County.

Drainage area.—Not determined.

Discharge records available.—Discharge measurements only.

Maximum temperature measured.—92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 22, 1962	1130	82	14.0				
Aug. 22, 1962	1330	92	1.95				
Sept. 4, 1963	0900	76	4.22				
Oct. 3, 1963	0945	67	.33				
Nov. 6, 1963	0950	52	8.58				
Oct. 22, 1964	1415	54	2.00				
Apr. 6, 1965	0810	52	11,600				
June 17, 1965	0730	72	3,380				
Aug. 23, 1966	1655	76	91.9				
Oct. 11, 1976	1305	71	1.40				
June 13, 1967	1220	73	8,680				
Sept. 6, 1967	1810	71	7.93				
Sept. 25, 1968	0900	69	37.3				

OSAGE RIVER BASIN

6-9180.8 Osage River near Schell City, Mo.

Location.—SW¼ sec.21, T.38 N., R.29 W., at bridge on county highway, 1½ miles north of Schell City, Vernon County.

Drainage area.—5,530 sq mi approximately.

Discharge records available.—Discharge measurements only.

Maximum temperature measured.—84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 22, 1962	1030	81	110				
Aug. 23, 1962	0745	84	49.8				
Sept. 4, 1963	1500	81	6.20				
Oct. 3, 1963	0845	67	.81				
Nov. 6, 1963	1315	58	.52				
Oct. 23, 1964	0900	53	8.67				
Apr. 7, 1965	1000	51	15,800				
June 17, 1965	1540	74	34,500				
Oct. 11, 1966	0850	60	48.1				
June 14, 1967	1135	72	14,900				
Sept. 7, 1967	1435	75	53.7				
May 29, 1968	1110	66	67,200				
Sept. 24, 1968	1655	71	3,640				
July 5, 1969	1200	82	36,700				

OSAGE RIVER BASIN

6-9184.4 Sac River near Dadeville, Mo.

Location.--Lat 37°26'35", long 93°41'05", in NE¼NE¼NW¼ sec.9, T.31 N., R.25 W., on downstream side of bridge on County Highway C, 2 miles upstream from Cave Spring Branch and 2 miles south of Dadeville.

Drainage area.--257 sq mi.

Discharge records available.--Water years 1965-66 (annual maximum), June 1966 to September 1969.

Maximum temperature measured.--79° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 6, 1964	1030	68	14.7				
Mar. 1, 1965	1355	50	205				
Apr. 15, 1965	1625	48	2,150				
July 7, 1965	0910	74	215				
Sept. 8, 1965	1430	76	102				
Aug. 12, 1966	1100	72	97.0				
Sept. 8, 1966	1145	72	37.7				
Oct. 12, 1966	1200	68	25.0				
Nov. 2, 1966	1415	46	22.0				
Dec. 21, 1966	1025	42	34.9				
Feb. 2, 1967	0835	41	117				
Mar. 1, 1967	1625	41	84.2				
Apr. 6, 1967	1140	65	66.9				
May 10, 1967	1025	63	162				
June 8, 1967	1140	74	86.1				
July 12, 1967	1410	69	310				
Aug. 9, 1967	1755	74	84.4				
Sept. 21, 1967	1320	70	42.5				
Oct. 18, 1967	1605	58	293				
Dec. 6, 1967	1715	52	472				
Jan. 24, 1968	1410	44	155				
Mar. 7, 1968	1545	49	155				
May 1, 1968	1555	66	165				
June 12, 1968	1500	76	110				
July 24, 1968	1110	79	50.9				
Oct. 1, 1968	1700	67	47.2				
Nov. 7, 1968	1705	52	522				
Dec. 11, 1968	1250	44	325				
Jan. 15, 1969	1040	44	239				
Feb. 13, 1969	1525	43	303				
Mar. 19, 1969	1130	51	171				
Apr. 13, 1969	1610	60	251				
June 4, 1969	1255	67	84.7				
Aug. 17, 1969	1420	77	18.0				

OSAGE RIVER BASIN

6-9184.6 Turnback Creek above Greenfield, Mo.

Location.--Lat 37°24'09", long 93°48'06", on line between secs.21 and 28, T.31 N., R.26 W., on downstream side of left pier of bridge on County Highway O, 2 miles southeast of Greenfield, and 1½ miles downstream from Limestone Creek.

Drainage area.--252 sq mi.

Discharge records available.--Sentember 1965 to September 1969.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 6, 1964	0920	54	18.2				
Mar. 1, 1965	1500	50	214				
Apr. 5, 1965	1645	48	2,440				
July 7, 1965	1110	70	314				
Sept. 8, 1965	1150	74	76.6				
Oct. 12, 1965	1055	56	86.9				
Nov. 24, 1965	1605	50	44.9				
Feb. 8, 1966	1505	42	115				
Mar. 23, 1966	1500	65	235				
May 3, 1966	1245	60	299				
May 4, 1966	1420	64	262				
June 17, 1966	1455	68	92.2				
July 7, 1966	1050	81	39.2				
Aug. 12, 1966	1230	70	96.4				
Sept. 8, 1966	1010	72	46.7				
Oct. 12, 1966	1010	72	28.6				
Nov. 8, 1966	1325	62	32.8				
Dec. 20, 1966	1550	47	34.5				
Feb. 1, 1967	1500	52	109				
Mar. 1, 1967	1450	51	72.0				
Apr. 6, 1967	0950	63	63.0				
May 10, 1967	1205	63	166				
June 8, 1967	1340	74	92.7				
Aug. 10, 1967	0830	78	80.0				
Sept. 21, 1967	1150	70	41.7				
Oct. 18, 1967	1400	58	220				
Dec. 6, 1967	1520	53	354				
Jan. 24, 1968	1605	45	150				
Mar. 7, 1968	1650	51	155				
May 2, 1968	1045	62	186				
June 12, 1968	1705	75	158				
July 24, 1968	1250	78	66.6				
Oct. 1, 1968	1810	66	50.4				
Nov. 8, 1968	1005	53	474				
Dec. 11, 1968	1040	44	297				
Jan. 15, 1969	0850	44	225				
Feb. 13, 1969	1705	42	303				
Mar. 19, 1969	0915	51	171				
Apr. 30, 1969	1410	60	292				
June 4, 1969	1450	64	93.8				
Aug. 13, 1969	1600	79	22.0				

OSAGE RIVER BASIN

6-9187. Oak Grove Branch near Brighton, Mo.

Location.--Lat 37°24'00", long 93°21'30", in SW¼NE¼ sec.21, T.31 N., R.22 W., on left bank just upstream from culvert on Greene County Highway BB, 0.6 mile west of U. S. Highway 13 and 4 miles south of Brighton.

Drainage area.--1.65 sq mi.

Discharge records available.--July 1956 to September 1959 (discontinued). Discharge measurements and daily gage-height record available to September 1969.

Maximum temperature measured.--74° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 21, 1961	0825	39	0.54				
Feb. 28, 1962	0845	33	.93				
May 16, 1963	0745	66	.22				
June 20, 1963	1350	72	.26				
Apr. 28, 1964	1345	57	.04				
Mar. 30, 1965	0830	40	.12				
Apr. 28, 1965	0720	60	.37				
May 28, 1965	0745	70	.61				
Sept. 7, 1965	1530	74	.32				
Dec. 23, 1965	1400	40	.29				
Feb. 8, 1966	0835	44	1.52				
Mar. 23, 1966	1730	48	.52				
May 3, 1966	1545	62	1.32				
June 8, 1966	0710	72	.04				
Oct. 12, 1966	1630	60	.01				
Nov. 9, 1966	0800	59	.08				
Dec. 21, 1966	0820	45	.16				
Feb. 2, 1967	1140	44	4.00				
Mar. 1, 1967	1805	50	1.23				
Apr. 6, 1967	1450	63	.30				
May 10, 1967	0820	57	1.05				
June 8, 1967	0910	66	.06				
Oct. 19, 1967	0800	52	.35				
Dec. 7, 1967	1100	48	3.55				
Jan. 24, 1968	1745	41	.08				
May 1, 1968	1410	66	.38				
Nov. 7, 1968	1150	53	.85				
Jan. 15, 1969	1510	43	.23				
Feb. 13, 1969	1205	39	.63				
Mar. 19, 1969	1525	55	.21				
May 1, 1969	0955	57	1.11				

OSAGE RIVER BASIN

6-9187.4 Little Sac River near Morrisville, Mo.

Location.--Lat 37°29'00", long 93°29'05", in SW¼SW¼ sec,20, T.32 N., R.23 W., on downstream side of center pier of Hamilton Bridge on County Highway K, 3 miles west of Morrisville and 0.7 mile upstream from Slagle Creek.

Drainage area.--237 sq mi.

Discharge records available.--August 1968 to September 1969.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 9, 1968	1655	68	13.1				
Sept. 23, 1968	1615	72	42.5				
Oct. 1, 1968	1530	70	17.5				
Nov. 7, 1968	1435	54	282				
Dec. 11, 1968	1450	44	172				
Jan. 15, 1969	1330	40	134				
Feb. 13, 1969	1340	40	227				
Mar. 19, 1969	1350	52	91.5				
May 1, 1969	0745	59	184				
June 4, 1969	1050	64	38.7				
Aug. 13, 1969	1240	77	5.32				

OSAGE RIVER BASIN

6-9188. Little Sac River at Aldrich, Mo.

Location.--Lat 37°32'45", long 93°34'03", in NE¼SW¼SE¼ sec.33, T.33 N., R.24 W., at downstream side of left pier of bridge on State Highway 123, 1/2 mile upstream from Coffman Branch and 1/2 mile west of Aldrich.

Drainage area.--304 sq mi.

Discharge records available.--July 1967 to September 1968 (discontinued). Occasional discharge measurements 1962-66, and annual peaks 1965-66.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 21, 1962	1400	73	2.61				
Aug. 23, 1962	1530	87	.97				
Sept. 3, 1963	1140	77	4.80				
Oct. 2, 1963	1050	66	2.51				
Nov. 5, 1963	1040	56	3.73				
Oct. 6, 1964	1145	57	4.97				
Oct. 21, 1964	1115	58	3.14				
Mar. 1, 1965	1200	43	482				
Apr. 15, 1965	1300	41	2,090				
July 6, 1965	1940	74	1,120				
Sept. 8, 1965	1630	78	151				
Oct. 12, 1966	1500	62	46.5				
Nov. 1, 1966	0840	50	32.8				
Nov. 23, 1966	1005	56	59.9				
July 13, 1967	0930	72	477				
Aug. 9, 1967	1535	78	39.6				
Sept. 7, 1967	1800	71	9.94				
Sept. 21, 1967	1355	71	178				
Oct. 19, 1967	0930	54	193				
Dec. , 1967	0925	48	918				
Jan. 24, 1968	1150	41	116				
Mar. 7, 1968	1425	46	85.7				
Apr. 30, 1968	1710	64	108				
June 12, 1968	1240	76	81.0				
July 24, 1968	0915	84	19.4				

OSAGE RIVER BASIN

6-9190. Sac River near Stockton, Mo.

Location.--Lat 37°42'03", long 93°45'20", in SW¼NW¼ sec.11, T.34 N., R.26 W., on right bank 20 ft upstream from bridge on State Highway 32, 3/4 of a mile upstream from Bear Creek, and 2 miles east of Stockton, and at mile 49.0.

Drainage area.—1,160 sq mi, approximately.

Discharge records available.--July 1921 to September 1969.

Maximum temperature measured.--92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 10, 1948	1550	60	97.1
Nov. 21, 1948	1500	51	345
Jan. 4, 1949	1625	41	390
May 4, 1949	1415	84	657
July 27, 1949	0850	80	313
Aug. 30, 1949	1215	78	131
Nov. 30, 1949	1255	47	238
Sept. 14, 1950	1500	70	448
Oct. 14, 1950	1010	62	411
Nov. 16, 1950	0950	47	146
Jan. 6, 1951	1100	38	141
Aug. 2, 1951	1640	76	636
June 4, 1952	1240	70	228
July 25, 1952	0945	83	75.4
Sept. 5, 1952	1430	80	85.8
July 9, 1953	0830	79	74.9
Aug. 22, 1953	0800	72	28.9
Oct. 8, 1953	1420	64	42.0
Nov. 18, 1953	1215	54	27.3
Jan. 7, 1954	0945	40	33.3
July 29, 1954	0830	82	6.60
Aug. 25, 1954	1245	92	9.53
Oct. 6, 1954	1300	70	129
Nov. 17, 1954	1245	53	285
Dec. 15, 1954	1335	40	323
June 15, 1956	0605	75	143
Oct. 11, 1956	0910	63	.14
Jan. 17, 1957	1115	33	34.6
Feb. 22, 1961	1200	44	356
June 29, 1961	1555	76	426
Sept. 7, 1961	1220	79	172
Sept. 19, 1961	1610	68	328
Oct. 11, 1961	1225	66	486
Jan. 24, 1962	1100	32	444
Oct. 2, 1962	0915	60	385
Dec. 19, 1962	1005	40	83.0
May 15, 1963	1430	74	1,640
July 25, 1963	1125	84	128
Oct. 3, 1963	1505	67	29.1
Nov. 6, 1963	1430	54	29.3
Dec. 12, 1963	1440	34	38.0
Jan. 22, 1964	1435	39	34.1
Feb. 20, 1964	0820	41	43.0
May 8, 1964	1125	71	247
June 2, 1964	1630	70	129
July 16, 1964	1155	73	216
Aug. 20, 1964	1625	80	89.7
Oct. 6, 1964	1430	59	43.1
Nov. 10, 1964	0930	58	64.8
Mar. 2, 1965	1055	42	1,820
Mar. 30, 1965	1320	42	499
Apr. 7, 1965	0815	56	14,900
Apr. 29, 1965	0900	60	1,280
May 27, 1965	1700	72	1,560
July 7, 1965	1150	74	2,030
Aug. 12, 1965	1100	77	93.3
Sept. 8, 1965	1100	75	502
Oct. 14, 1965	1000	58	275
Nov. 29, 1965	1500	44	133
Dec. 21, 1965	1200	38	185
Feb. 11, 1966	1150	36	11,900
Mar. 25, 1966	0745	45	781
May 3, 1966	1000	56	1,230
June 7, 1966	1150	70	447
July 7, 1966	1330	80	133
Aug. 11, 1966	1310	72	238
Sept. 7, 1966	1630	75	151
Sept. 27, 1966	0710	64	4,350
Oct. 12, 1966	0725	59	162
Nov. 8, 1966	1025	58	157
Dec. 20, 1966	1345	52	218
Feb. 1, 1967	1145	46	634
Mar. 1, 1967	0915	40	435
Apr. 5, 1967	1510	68	297
May 10, 1967	1725	63	704
June 8, 1967	1615	74	339
Aug. 9, 1967	0920	76	263
Sept. 21, 1967	0745	69	181
Nov. 20, 1967	1705	55	700
Dec. 6, 1967	1300	42	2,110
Jan. 24, 1968	0920	43	552
Apr. 30, 1968	1505	63	608
June 12, 1968	0750	73	594
July 23, 1968	1720	89	184
Sept. 9, 1968	1115	68	187
Oct. 2, 1968	0905	68	172
Nov. 8, 1968	1345	50	1,910
Dec. 11, 1968	0815	42	1,040
Jan. 14, 1969	1555	35	896
Mar. 31, 1969	1625	50	1,950
May 20, 1969	1715	76	510
June 11, 1969	0940	76	396
July 23, 1969	1910	86	147
Aug. 28, 1969	0820	76	64.1

OSAGE RIVER BASIN

6-9195. Cedar Creek near Pleasant View, Mo.

Location.--Lat 37°50'03", long 93°52'31", in NE¼ sec.2, T.35 N., R.27 W., on downstream side of right pier of bridge on State Highway 39, 1½ miles north of Pleasant View, 1-3/4 miles downstream from Alder Creek, and 5-3/4 miles upstream from mouth.

Drainage area.--420 sq mi, approximately.

Discharge records available.--April 1923 to September 1926, October 1948 to September 1969.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 21, 1948	1635	47	34.8
Jan. 4, 1949	1410	39	35.1
May 4, 1949	1055	77	156
June 21, 1949	1750	81	165
July 27, 1949	0630	80	27.6
Aug. 30, 1949	1030	74	7.20
Nov. 30, 1949	1030	55	19.9
June 22, 1950	1000	78	21.8
Sept. 14, 1950	1330	69	101
Oct. 13, 1950	1620	62	54.3
Nov. 15, 1950	1630	55	9.80
Jan. 5, 1951	1530	43	75.6
Feb. 16, 1951	1645	34	208
Mar. 24, 1951	0655	48	173
May 3, 1951	0645	64	349
June 8, 1951	1030	68	224
Aug. 2, 1951	1355	82	27.8
July 24, 1952	1610	88	3.30
Sept. 5, 1952	1155	73	3.20
Dec. 12, 1952	1245	40	1.04
Mar. 6, 1953	1420	47	217
July 9, 1953	1040	80	.35
May 6, 1954	1030	59	98.5
June 17, 1954	1015	79	15.1
Nov. 17, 1954	1455	53	42.7
Dec. 15, 1954	1515	39	20.1
June 15, 1956	0830	76	11.4
Jan. 17, 1957	0900	33	1.10
Feb. 22, 1961	1050	44	50.2
Sept. 7, 1961	1050	73	85.1
Sept. 19, 1961	1430	66	138
Oct. 11, 1961	1025	61	77.6
Jan. 24, 1962	1300	32	78.3
Aug. 23, 1962	1105	82	.53
Oct. 2, 1962	1235	60	689
Dec. 19, 1962	0845	40	26.8
May 28, 1963	0610	64	3,680
June 20, 1963	0740	72	63.1
July 25, 1963	0915	84	.74
Oct. 3, 1963	1430	68	.09
Dec. 12, 1963	1000	34	.92
Jan. 22, 1964	1120	45	.15
Feb. 19, 1964	1640	44	.66
May 8, 1964	0900	70	56.6
June 2, 1964	1550	67	58.0
July 16, 1964	0945	74	31.2
Aug. 20, 1964	1410	79	2.84
Oct. 6, 1964	1630	57	3.70
Nov. 10, 1964	1210	58	2.60
Mar. 2, 1965	1445	39	1,090
Mar. 30, 1965	1605	43	18.5
Apr. 7, 1965	1245	49	4,190
Apr. 28, 1965	1640	59	275
May 27, 1965	1300	74	94.7
July 7, 1965	1540	76	247
Aug. 12, 1965	0935	70	2.01
Sept. 8, 1965	1435	75	77.1
Oct. 13, 1965	1725	59	23.8
Nov. 29, 1965	1630	42	14.3
Dec. 21, 1965	1245	38	29.7
Feb. 10, 1966	0830	34	950
Mar. 25, 1966	1035	49	104
May 3, 1966	0725	54	580
June 28, 1966	1330	79	10.4
July 6, 1966	1440	88	5.50
Aug. 11, 1966	1020	70	11.6
Sept. 7, 1966	1430	74	2.33
Sept. 27, 1966	1610	63	16.7
Oct. 11, 1966	1605	62	1.50
Nov. 8, 1966	0835	54	3.08
Dec. 20, 1966	1100	40	10.0
Feb. 1, 1967	0745	42	174
Mar. 1, 1967	1145	50	70.3
Apr. 5, 1967	0930	64	62.0
May 10, 1967	1440	63	182
June 9, 1967	0940	76	31.4
July 11, 1967	1320	75	160
Aug. 8, 1967	1550	78	18.8
Sept. 20, 1967	1415	69	1.86
Oct. 18, 1967	1105	55	391
Dec. 6, 1967	0940	45	364
Jan. 23, 1968	1455	39	109
Mar. 7, 1968	1015	42	66.0
Apr. 30, 1968	1215	60	85.8
June 11, 1968	1630	77	115
July 23, 1968	1445	85	14.9
Aug. 27, 1968	1600	80	73.9
Oct. 2, 1968	1135	68	82.6
Nov. 8, 1968	1700	48	389
Dec. 10, 1968	1440	41	172
Jan. 14, 1969	1250	35	171
Feb. 14, 1969	1135	39	263
Mar. 18, 1969	0855	44	158
June 10, 1969	1825	72	159
July 23, 1969	1550	82	15.7
Aug. 27, 1969	1505	76	17.1

OSAGE RIVER BASIN

6-9205. Osage River at Osceola, Mo.

Location.--Lat 38°03'44", long 93°41'37", in NE¼NE¼ sec.17, T.38 N., R.25 W., on left bank at downstream side of bridge on State Highway 13, half a mile downstream from Gallinipper Creek, 1 mile downstream from hydroelectric plant of Missouri Public Service Company, 1 mile northeast of Osceola, and at mile 230.9.

Drainage area.--8,220 sq mi, approximately.

Discharge records available.--October 1917 to September 1928, October 1930 to September 1969. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected at site 1½ miles upstream April 1910 to November 1930, at present site November 1930 to April 1933 and since February 1938 are contained in reports of U. S. Weather Bureau.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 2, 1947	0605	87	36.5				
Sept. 9, 1947	1050	90	26.6				
Oct. 21, 1947	0655	60	25.8				
Oct. 12, 1949	0640	59	32.6				
Nov. 30, 1949	0730	40	32.7				
Oct. 14, 1950	0630	61	61.6				
Nov. 15, 1950	1040	59	31.3				
June 5, 1951	0625	74	37.5				
Sept. 5, 1952	0630	73	29.3				
July 10, 1953	0640	75	23.2				
Oct. 8, 1953	1110	62	19.8				
Nov. 19, 1953	0830	56	15.8				
Jan. 7, 1954	1350	47	22.6				
July 29, 1954	1815	88	9.95				
Jan. 16, 1957	1335	34	9.67				
Mar. 1, 1962	0800	32	5.59				
Aug. 28, 1962	0930	8.	27.2				
May 14, 1963	1030	72	1,700				
July 23, 1963	1355	84	1,780				
Oct. 2, 1963	1610	72	65.8				
Nov. 5, 1963	1500	59	21.9				
Dec. 10, 1963	1235	36	18.1				
Jan. 21, 1964	0850	41	29.4				
Feb. 18, 1964	1715	42	47.1				
July 15, 1964	1830	73	121				
Aug. 19, 1964	0935	76	908				
Oct. 8, 1964	0845	64	100				
Nov. 10, 1964	1410	61	33.3				
Apr. 1, 1965	1005	48	3,560				
Apr. 28, 1965	1250	60	3,750				
May 27, 1965	1120	73	1,970				
July 9, 1965	1300	82	5,370				
Aug. 10, 1965	1650	80	246				
Dec. 21, 1965	1650	39	306				
Mar. 28, 1966	1150	55	1,780				
May 2, 1966	1140	56	6,800				
June 7, 1966	0545	72	761				
July 6, 1966	1120	82	897				
Aug. 10, 1966	1500	77	1,280				
Sept. 6, 1966	1645	74	1,640				
Oct. 10, 1966	1605	62	153				
Nov. 7, 1966	1645	54	165				
Dec. 20, 1966	0715	43	106				
Feb. 28, 1967	1530	42	1,170				
Apr. 13, 1967	1115	63	2,080				
May 9, 1967	1255	52	4,790				
May 16, 1967	0705	57	17,700				
July 11, 1967	1600	78	7,750				
Aug. 8, 1967	1115	80	1,790				
Sept. 20, 1967	1215	70	2,050				
Oct. 17, 1967	1220	62	7,750				
Dec. 5, 1967	1555	41	6,370				
Jan. 23, 1968	1215	35	3,730				
Apr. 26, 1968	0945	57	12,000				
May 27, 1968	1450	64	36,700				
June 11, 1968	1225	79	5,350				
July 23, 1968	1045	87	437				
Aug. 27, 1968	1115	78	5,200				
Nov. 13, 1968	1345	45	5,390				
Dec. 10, 1968	1055	41	4,220				
Jan. 13, 1969	1525	34	3,310				
Mar. 17, 1969	1710	45	3,860				
June 10, 1969	1435	76	3,010				
July 23, 1969	1320	80	3,420				
Aug. 27, 1969	1105	77	2,450				
Sept. 30, 1969	1715	76	638				

OSAGE RIVER BASIN

6-9210. Pomme de Terre River near Bolivar, Mo.

Location.--Lat 37°36'20", long 93°18'35", in SW¼NE¼ sec.11, T.33 N., R.22 W., on downstream side of left main pier of bridge on State Highway 32 in Burns, 4-3/4 miles upstream from Hominy Creek, 5½ miles east of Bolivar, and at mile 86.1.

Drainage area.--225 sq mi.

Discharge records available.--October 1950 to September 1969, (discontinued).

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 16, 1950	1310	54	20.5
Jan. 6, 1951	1230	37	23.8
Feb. 17, 1951	1415	35	453
Feb. 27, 1951	1420	54	296
Mar. 24, 1951	1305	50	156
May 3, 1951	1240	69	274
June 8, 1951	1745	74	81.2
Aug. 2, 1951	1805	77	57.1
Sept. 28, 1951	1300	63	282
June 4, 1952	1405	72	27.4
July 25, 1952	1200	85	8.02
Oct. 18, 1952	0935	50	4.89
Dec. 13, 1952	0930	38	11.6
Mar. 7, 1953	1015	47	156
May 28, 1953	0930	74	67.2
July 9, 1953	1755	76	5.68
Aug. 22, 1953	0950	75	6.59
Nov. 18, 1953	1415	55	4.58
Jan. 7, 1954	0805	37	6.33
Feb. 17, 1954	1550	51	11.0
May 5, 1954	1300	60	107
June 16, 1954	1240	88	19.2
Aug. 25, 1954	1110	85	6.40
Nov. 17, 1954	1045	52	22.0
Feb. 22, 1961	1455	46	118
June 30, 1961	0840	77	22.3
Sept. 7, 1961	1400	81	29.3
Sept. 19, 1961	1435	70	21.9
Oct. 12, 1961	0845	66	17.6
Nov. 22, 1961	1450	47	40.3
Dec. 20, 1961	1720	38	165
Jan. 23, 1962	1545	33	128
Feb. 27, 1962	1600	38	187
Aug. 30, 1962	0900	76	2.80
Oct. 1, 1962	1430	61	65.5
Dec. 19, 1962	1310	38	15.0
May 15, 1963	1620	76	66.1
June 20, 1963	1545	74	441
July 22, 1963	1355	81	19.2
Sept. 30, 1963	1445	68	2.40
Nov. 4, 1963	1530	54	4.20
Dec. 13, 1963	0825	33	7.40
Jan. 23, 1964	0820	38	6.71
Feb. 20, 1964	1145	41	7.10
Apr. 28, 1964	1515	62	110
June 3, 1964	0720	65	13.5
July 16, 1964	1515	75	19.7
Aug. 21, 1964	0800	75	7.60
Oct. 5, 1964	1515	61	3.30
Nov. 9, 1964	1630	58	13.7
Mar. 4, 1965	0815	36	308
Mar. 11, 1965	1445	44	269
Mar. 30, 1965	1120	43	103
Apr. 6, 1965	1400	60	2,030
Apr. 29, 1965	1230	61	115
May 28, 1965	0945	69	84.0
July 6, 1965	1520	74	1,010
Aug. 12, 1965	1315	76	23.6
Sept. 7, 1965	1150	74	2.50
Oct. 14, 1965	1445	60	53.0
Nov. 29, 1965	1230	44	24.2
Dec. 23, 1965	1300	40	45.3
Feb. 8, 1966	1055	44	185
Mar. 24, 1966	0800	48	134
May 4, 1966	0750	60	219
June 8, 1966	0750	68	123
July 7, 1966	1620	82	12.3
Aug. 11, 1966	1545	78	28.2
Oct. 13, 1966	0730	63	45.8
Nov. 9, 1966	0935	62	38.6
Dec. 21, 1966	1245	45	66.8
Feb. 2, 1967	1330	44	1,840
Mar. 2, 1967	1000	47	101
Mar. 7, 1967	0945	39	262
Apr. 6, 1967	1705	65	63.2
May 11, 1967	0805	66	118
June 7, 1967	1615	76	44.9
Aug. 10, 1967	1210	72	59.8
Sept. 21, 1967	1750	70	263
Oct. 19, 1967	1150	54	192
Oct. 31, 1967	0720	45	3,810
Dec. 7, 1967	1325	48	602
Jan. 25, 1968	0910	39	90.2
May 1, 1968	1215	66	85.5
June 13, 1968	0810	75	61.2
July 24, 1968	1635	86	13.6
Aug. 28, 1968	1240	75	10.9
Oct. 1, 1968	1310	71	9.70
Nov. 7, 1968	0940	51	185
Dec. 12, 1968	0755	48	124
Feb. 3, 1969	0930	37	179
Mar. 20, 1969	0845	51	95.0
May 1, 1969	1320	62	182
June 11, 1969	1425	78	35.5
Aug. 23, 1969	1205	78	10.8

OSAGE RIVER BASIN

6-9210.7 Pomme de Terre River near Polk, Mo.

Location.--Lat 37°40'55", long 93°22'10", NE¼NW¼NW¼ sec.17, T.34 N., R.22 W., on right bank, 150 feet upstream from Jefferson Bridge on Polk County Highway D, 5 miles northeast of Bolivar and 5 miles southwest of Polk.

Drainage area.--276 sq mi.

Discharge record available.--October 1968 to September 1969.

Maximum temperature measured.--76° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 19, 1968	1505	41	121				
Jan. 16, 1969	0900	41	193				
Feb. 3, 1969	1525	43	496				
Feb. 12, 1969	1725	42	220				
Mar. 19, 1969	1740	55	115				
Mar. 27, 1969	1250	44	563				
May 1, 1969	1110	62	205				
June 5, 1969	1010	68	45.1				
June 11, 1969	1215	76	48.2				
Aug. 14, 1969	0950	74	4.76				
Sept. 16, 1969	1215	68	1,270				

OSAGE RIVER BASIN

6-9212. Lindley Creek near Polk, Mo.

Location.—Lat 37°45'02", long 93°15'58", in NE¼SE¼ sec.29, T.35 N., R.21 W., 2½ miles northeast of Polk, and 11 miles upstream from Ingalls Creek.

Drainage area.—112 sq mi.

Discharge records available.—April 1957 to September 1969.

Maximum temperature measured.—89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 22, 1961	1610	45	55.4				
June 30, 1961	1000	76	1.17				
Sept. 5, 1961	1530	75	11.3				
Sept. 19, 1961	1325	66	6.20				
Nov. 22, 1961	1620	47	74.6				
Dec. 21, 1961	1050	37	101				
Jan. 23, 1962	1300	32	47.8				
Feb. 27, 1962	1330	36	122				
Dec. 19, 1962	1440	38	5.80				
May 15, 1963	1750	76	25.5				
June 20, 1963	1830	73	168				
July 22, 1963	1030	74	1.58				
Dec. 13, 1963	1200	36	.59				
Jan. 23, 1964	1230	44	.95				
Feb. 20, 1964	1345	41	2.40				
Apr. 28, 1964	1645	60	57.4				
June 3, 1964	0830	63	6.50				
July 16, 1964	1730	75	1.80				
Aug. 21, 1964	1030	75	.64				
Oct. 5, 1964	1340	59	.02				
Nov. 9, 1964	1200	59	0				
Mar. 4, 1965	1115	35	129				
Mar. 29, 1965	1320	46	33.0				
Apr. 16, 1965	1820	52	618				
Apr. 29, 1965	1400	59	80.3				
May 24, 1965	1630	76	5.50				
Sept. 13, 1965	1625	73	12.6				
Oct. 15, 1965	0950	61	8.90				
Nov. 22, 1965	1430	50	17.0				
Apr. 20, 1966	1825	49	2,580				
May 4, 1966	1015	62	88.2				
June 8, 1966	1050	71	58.9				
July 8, 1966	1200	81	2.18				
Aug. 8, 1966	1500	89	0				
Sept. 6, 1966	1130	72	0				
Oct. 13, 1966	1010	62	2.76				
Nov. 9, 1966	1200	62	9.03				
Nov. 10, 1966	1205	51	117				
Dec. 21, 1966	1450	42	18.1				
Mar. 3, 1967	1325	47	28.8				
Apr. 12, 1967	1520	64	8.94				
May 11, 1967	1055	67	36.0				
July 13, 1967	1410	69	65.2				
Aug. 10, 1967	1605	72	72.0				
Sept. 22, 1967	0830	76	10.2				
Oct. 19, 1967	1425	56	60.6				
Dec. 7, 1967	1550	47	218				
Jan. 25, 1968	1320	33	36.1				
Mar. 8, 1968	1205	48	25.5				
May 1, 1968	1015	64	34.6				
June 13, 1968	1100	73	32.9				
July 25, 1968	1215	78	212				
Oct. 1, 1968	1130	66	1.45				
Nov. 6, 1968	1545	51	81.0				
Dec. 11, 1968	1015	48	57.4				
Jan. 16, 1969	1250	42	287				
Feb. 12, 1969	1535	41	89.8				
Mar. 20, 1969	1145	53	48.2				
May 1, 1969	1525	62	63.1				
June 5, 1969	1205	68	10.3				
June 11, 1969	1640	77	13.3				
Aug. 14, 1969	1225	71	.03				
Aug. 28, 1969	1400	78	.20				

OSAGE RIVER BASIN

6-9213.5 Pomme de Terre River near Hermitage, Mo.

Location.--Lat 37°54'20", long 93°19'45", in NW¼NW¼ sec.2, T.36 N., R.22 W., on right bank 2,000 ft downstream from outlet of Pomme de Terre Reservoir, 2½ miles southwest of Hermitage, 4½ miles upstream from Green Branch, and at mile 43.4.

Drainage area.--615 sq mi.

Discharge records available.--August 1960 to September 1969.

Maximum temperature measured.--79° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 20, 1961	1320	41	397				
Mar. 28, 1961	1430	56	560				
June 29, 1961	1320	78	45.7				
Sept. 6, 1961	0715	74	10.3				
Sept. 19, 1961	1115	68	85.2				
Oct. 10, 1961	0945	66	22.9				
Nov. 20, 1961	1405	47	21.2				
Dec. 18, 1961	1100	39	170				
Jan. 25, 1962	1400	23	20.9				
Mar. 2, 1962	1115	34	21.2				
Aug. 27, 1962	1625	79	19.6				
Oct. 4, 1962	1405	67	19.9				
Apr. 8, 1963	1710	62	23.0				
June 17, 1963	1610	60	593				
July 23, 1963	0950	63	50.5				
Oct. 2, 1963	0900	60	49.3				
Dec. 9, 1963	1615	47	50.6				
Jan. 20, 1964	1350	38	48.7				
June 1, 1964	1240	56	100				
July 14, 1964	1300	59	492				
Aug. 18, 1964	1355	65	118				
Nov. 11, 1964	1400	54	55.8				
Feb. 22, 1965	1610	41	49.3				
Apr. 1, 1965	1445	44	206				
Apr. 26, 1965	1540	53	3,180				
May 25, 1965	1045	52	187				
July 15, 1965	1330	70	1,880				
Aug. 10, 1965	1015	55	183				
Sept. 14, 1965	1410	70	494				
Oct. 11, 1965	1730	65	279				
Nov. 30, 1965	1140	52	53.1				
Dec. 23, 1965	0910	52	51.6				
Feb. 18, 1966	0920	38	1,940				
Mar. 24, 1966	1515	45	272				
May 5, 1966	0830	60	2,000				
June 9, 1966	0805	57	56.8				
Aug. 9, 1966	1015	56	106				
Sept. 6, 1966	1435	54	107				
Oct. 13, 1966	1355	60	184				
Nov. 10, 1966	0840	52	54.2				
Dec. 22, 1966	0830	45	222				
Feb. 3, 1967	0755	40	534				
Mar. 3, 1967	1040	41	227				
Apr. 12, 1967	1230	58	96.8				
May 12, 1967	1400	60	870				
May 16, 1967	1130	60	4,640				
June 7, 1967	1000	61	179				
July 14, 1967	0700	68	2,840				
Aug. 11, 1967	0920	60	109				
Sept. 22, 1967	1040	65	29.0				
Nov. 20, 1967	1355	56	185				
Dec. 8, 1967	0955	48	509				
Jan. 25, 1968	1535	35	140				
Apr. 29, 1968	1640	56	208				
June 13, 1968	1410	60	935				
July 25, 1968	1545	60	376				
Aug. 29, 1968	0800	60	50.9				
Oct. 1, 1968	0900	60	9.67				
Nov. 6, 1968	1130	52	18.3				
Dec. 12, 1968	1315	50	51.0				
Jan. 16, 1969	1705	38	1,540				
Feb. 12, 1969	1330	39	1,940				
Mar. 20, 1969	1525	45	303				
May 2, 1969	1330	48	801				
June 12, 1969	1900	64	32.5				
June 24, 1969	0950	62	29.7				

OSAGE RIVER BASIN

6-9215. Pomme de Terre River at Hermitage, Mo.

Location.--Lat 37°56'45", long 93°18'35", in SE¼NE¼ sec.23, T.37 N., R.22 W., on right bank at downstream side of bridge on U. S. Highway 54, a quarter of a mile east of Hermitage and 1½ miles downstream from Mill (Crane) Creek.

Drainage area.--655 sq mi.

Discharge records available.--July 1921 to September 1965 (discontinued).

Maximum temperature measured.-- 90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 5, 1945	[illegible]	82	8.69
Oct. 17, 1945	0810	57	378
June 26, 1946	1015	78	63.9
Aug. 7, 1946	0835	79	13.3
Oct. 16, 1946	1105	60	10.5
Nov. 20, 1946	0850	45	440
Dec. 17, 1946	1150	40	509
Jan. 30, 1947	0925	40	178
Mar. 5, 1947	0900	37	78.8
Apr. 23, 1947	0940	59	404
May 25, 1947	1010	64	457
Aug. 2, 1947	1320	90	40.5
Sept. 9, 1947	0805	80	6.48
Dec. 6, 1947	1430	41	45.5
Jan. 18, 1948	0945	32	71.4
Mar. 6, 1948	1115	40	658
Apr. 12, 1948	0855	59	207
May 24, 1948	1420	72	268
July 7, 1948	1605	83	376
Aug. 17, 1948	1500	79	78.4
Oct. 12, 1948	1520	63	14.1
Nov. 22, 1948	1455	43	194
Jan. 3, 1949	1315	39	196
May 3, 1949	1145	68	422
June 21, 1949	0745	80	227
July 26, 1949	1120	82	120
Aug. 29, 1949	1640	76	71.9
Aug. 1, 1950	1550	72	357
Sept. 13, 1950	0950	67	144
Oct. 13, 1950	0930	61	146
Nov. 15, 1950	0850	43	48.2
Jan. 4, 1951	1600	38	69.3
Feb. 15, 1951	1000	33	331
Mar. 23, 1951	1135	50	475
May 2, 1951	1055	61	764
June 7, 1951	1445	73	156
July 23, 1952	1435	87	33.3
Sept. 4, 1952	1220	69	33.3
Oct. 16, 1952	1110	59	7.51
Dec. 11, 1952	1140	41	30.6
Jan. 22, 1953	1210	39	52.6
July 10, 1953	1005	78	11.4
Aug. 20, 1953	1305	80	6.51
Oct. 8, 1953	1150	66	.47
Nov. 19, 1953	1305	56	5.14
Jan. 8, 1954	0900	40	10.9
Feb. 19, 1954	0755	48	16.8
May 6, 1954	1500	58	311
June 17, 1954	1410	89	46.2
July 30, 1954	0815	81	.06
Aug. 26, 1954	0930	83	17.1
Nov. 18, 1954	1440	53	49.8
Dec. 16, 1954	1330	40	186
Feb. 20, 1961	1100	43	499
June 28, 1961	1500	79	47.2
Sept. 5, 1961	1700	78	10.8
Sept. 19, 1961	1025	66	90.8
Oct. 10, 1961	1110	66	22.7
Nov. 20, 1961	1525	45	40.3
Dec. 18, 1961	1540	38	281
Jan. 25, 1962	1200	32	35.6
Mar. 2, 1962	0845	33	57.7
Aug. 28, 1962	0750	72	17.1
Oct. 4, 1962	1130	63	35.4
Apr. 9, 1963	0755	61	36.5
May 14, 1963	0830	78	51.7
June 18, 1963	0545	58	626
July 23, 1963	0645	73	51.4
Oct. 2, 1963	1030	61	60.2
Nov. 5, 1963	1200	53	53.3
Dec. 10, 1963	1045	38	54.7
Jan. 20, 1964	1600	37	49.4
Feb. 18, 1964	1605	43	54.1
June 1, 1964	1430	61	121
July 14, 1964	1110	59	492
Aug. 19, 1964	1710	64	132
Oct. 9, 1964	0845	56	49.0
Nov. 11, 1964	1630	61	50.0
Feb. 23, 1965	0910	40	55.8
Apr. 1, 1965	1320	44	228
Apr. 27, 1965	0920	54	3,360
May 25, 1965	0850	58	183
July 15, 1965	1030	70	1,980
Aug. 10, 1965	0850	64	206
Sept. 14, 1965	1005	69	509
Apr. 1, 1969	0825	46	2,070
May 20, 1969	1530	71	35.0

OSAGE RIVER BASIN

6-9215.4 Pomme de Terre River near Avery, Mo.

Location.--Lat 38°05'25", long 93°21'20", in SW¼NW¼ sec.33, T.39 N., R.22 W., Benton County, at bridge on County Route B, 9 miles upstream from Little Pomme de Terre River, and 1.5 miles north of Avery.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 18, 1962	1115	38	27.7				
May 14, 1963	1500	78	49.7				
May 27, 1963	1830	65	2,290				
June 18, 1963	1710	66	865				
July 24, 1963	0855	84	58.3				
Oct. 2, 1963	1235	65	294				
Dec. 11, 1963	0745	34	60.0				
Jan. 21, 1964	1315	35	52.6				
Feb. 19, 1964	1115	41	57.4				
Oct. 9, 1964	1015	54	49.1				
Oct. 14, 1966	[illegible]	64	180				

OSAGE RIVER BASIN

6-9216. South Grand River at Urich, Mo.

Location.--Lat 38°27'08", long 94°00'13", in SE¼NW¼ sec.10, T.42 N., R.29 W., on left bank 10 feet downstream from bridge on County Highway K, half a mile south of Urich, one mile upstream from White Oak Creek, and 1.7 miles downstream from Knob Creek.

Drainage area.--670 sq mi.

Discharge records available.--October 1960 to September 1969 (discontinued).

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 25, 1961	1100	33	4.71				
Feb. 9, 1961	1305	35	5.66				
Feb. 20, 1961	1750	42	176				
June 6, 1961	1835	78	84.6				
Aug. 18, 1961	1030	82	9.10				
Aug. 30, 1961	1220	86	8.56				
Oct. 4, 1961	1510	65	94.1				
Oct. 24, 1961	1240	58	99.3				
Dec. 8, 1961	1040	40	143				
Dec. 20, 1962	0810	37	8.82				
May 15, 1963	0930	80	16.7				
June 19, 1963	1440	72	83.5				
Feb. 19, 1964	1225	42	1.84				
May 7, 1964	1425	74	70.6				
Aug. 20, 1964	0835	76	2.01				
Oct. 7, 1964	1050	60	.86				
Nov. 11, 1964	0800	58	.07				
Mar. 31, 1965	0930	50	249				
Apr. 27, 1965	1655	60	131				
May 26, 1965	1000	76	19.4				
June 14, 1965	1650	69	10,500				
July 8, 1965	1000	80	105				
Aug. 11, 1965	1010	80	5.39				
Oct. 13, 1965	1240	60	27.9				
Nov. 23, 1965	1605	53	34.3				
Dec. 22, 1965	1215	40	26.1				
Mar. 15, 1966	0930	38	344				
Apr. 26, 1966	1215	58	406				
June 6, 1966	1145	74	83.8				
July 5, 1966	1540	88	4.03				
Aug. 10, 1966	0940	74	33.8				
Aug. 18, 1966	1615	74	1,010				
Aug. 19, 1966	1005	72	578				
Sept. 2, 1966	1320	72	4.14				
Oct. 10, 1966	1055	59	1.49				
Nov. 7, 1966	1115	54	.24				
Dec. 19, 1966	1350	43	2.18				
Jan. 30, 1967	1530	35	61.0				
Feb. 27, 1967	1740	40	5.37				
May 8, 1967	1510	52	340				
May 30, 1967	1710	66	8,790				
July 19, 1967	1125	74	23.4				
Aug. 7, 1967	1440	76	698				
Sept. 19, 1967	1450	74	8.40				
Oct. 16, 1967	1415	56	660				
Nov. 21, 1967	1345	51	180				
Dec. 5, 1967	0925	39	707				
Jan. 29, 1968	1145	39	201				
Apr. 23, 1968	1430	55	6,100				
Apr. 26, 1968	1245	57	379				
May 26, 1968	1310	60	8,800				
July 18, 1968	1510	80	3,690				
July 22, 1968	1440	91	13.3				
Aug. 26, 1968	1240	79	74.6				
Oct. 3, 1968	0930	61	3.48				
Nov. 21, 1968	1615	40	143				
Dec. 20, 1968	1040	35	294				
Jan. 20, 1969	1520	36	410				
Feb. 7, 1969	1020	33	3,280				
Mar. 25, 1969	1035	40	2,640				
Apr. 1, 1969	1130	46	261				
May 7, 1969	1100	72	212				
May 20, 1969	1320	69	65.0				
June 9, 1969	1600	69	553				
July 22, 1969	1625	82	134				

OSAGE RIVER BASIN

6-9217.2 Big Creek at Blairstown, Mo.

Location.--Lat 38°33'17", long 93°57'54", in NE¼SW¼ sec.36, T.44 N., R.28 W., on downstream side of right bridge pier on County Highway N, 0.3 mile west of Blairstown, 0.8 mile downstream from Bear Creek, and 1½ miles upstream from Brushy Creek.

Drainage area.--414 sq mi.

Discharge records available.--August 1960 to September 1969.

Maximum temperature measured.--93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 25, 1961	1310	32	2.02				
Feb. 20, 1961	1525	40	135				
June 6, 1961	0915	76	39.3				
Aug. 18, 1961	0910	78	11.5				
Aug. 30, 1961	1310	84	6.00				
Sept. 20, 1961	1245	66	123				
Oct. 4, 1961	1310	60	64.4				
Oct. 24, 1961	1800	58	77.7				
Dec. 8, 1961	1310	40	74.3				
Dec. 29, 1961	1310	34	134				
Dec. 18, 1962	1455	40	2.40				
Dec. 20, 1962	1010	35	1.80				
May 14, 1963	1800	80	4.20				
June 19, 1963	1110	72	31.8				
July 24, 1963	1345	93	1.40				
Feb. 19, 1964	1040	39	.22				
May 7, 1964	1150	70	29.8				
June 2, 1964	1000	64	70.8				
Oct. 7, 1964	1540	59	.10				
Nov. 11, 1964	1105	58	0				
Feb. 23, 1965	1230	34	38.1				
Mar. 31, 1965	1340	44	113				
Apr. 28, 1965	0910	55	45.9				
May 26, 1965	1630	74	15.4				
July 8, 1965	1435	80	6.50				
Aug. 11, 1965	1150	80	12.2				
Sept. 9, 1965	1510	79	99.0				
Oct. 13, 1965	0935	54	14.2				
Nov. 23, 1965	1400	54	21.8				
Dec. 22, 1965	1430	40	14.0				
Mar. 15, 1966	1430	38	184				
June 6, 1966	0835	61	239				
July 5, 1966	1230	88	8.04				
Aug. 9, 1966	1510	79	.85				
Aug. 18, 1966	1245	72	687				
Sept. 2, 1966	1030	74	2.90				
Oct. 10, 1966	0835	57	.34				
Nov. 7, 1966	0940	54	.08				
Dec. 19, 1966	1145	43	.70				
Jan. 30, 1967	1205	33	54.1				
Feb. 27, 1967	1510	39	2.90				
Apr. 3, 1967	1300	56	1,400				
June 20, 1967	1030	72	3.90				
July 19, 1967	0830	72	12.4				
Apr. 7, 1967	1055	74	14.6				
Sept. 19, 1967	1240	70	1.70				
Dec. 4, 1967	1125	38	278				
Jan. 29, 1968	1420	38	130				
Apr. 23, 1968	1700	55	2,660				
May 25, 1968	1745	64	5,600				
June 10, 1968	1045	82	41.0				
July 18, 1968	1240	80	1,640				
July 22, 1968	1115	82	9.20				
Aug. 26, 1968	0945	75	15.3				
Oct. 3, 1968	1135	64	.90				
Nov. 21, 1968	1050	39	57.7				
Dec. 9, 1968	1200	32	46.8				
Jan. 20, 1969	1050	34	211				
Feb. 7, 1969	1235	34	1,950				
Feb. 18, 1969	1130	37	170				
Mar. 24, 1969	1725	40	3,680				
June 9, 1969	1140	68	303				
June 25, 1969	1130	74	2,480				
July 22, 1969	1200	80	29.3				
Sept. 18, 1969	1705	68	332				
Sept. 29, 1969	1100	68	16.0				

OSAGE RIVER BASIN

6-9217.4 Brushy Creek near Blairstown, Mo.

Location.--Lat 38°31'42", long 94°00'37", in NE¼SE¼ sec.9, T.43 N., R.28 W., at culvert under County Highway B, 3 miles upstream from mouth and 3½ miles southwest of Blairstown.

Drainage area.--1.15 sq mi.

Discharge records available.--Discharge measurements and gage-height record available from August 1960 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 20, 1961	1615	40	0.53				
Mar. 10, 1961	1225	42	1.02				
Apr. 4, 1961	0800	45	.66				
Apr. 25, 1961	0700	50	1.47				
June 6, 1961	0825	78	.25				
Sept. 6, 1961	1615	82	.15				
Oct. 24, 1961	1340	53	.25				
Nov. 2, 1961	1530	45	20.8				
Nov. 8, 1961	0825	38	0.67				
Dec. 29, 1961	1450	36	.67				
June 19, 1963	1020	69	.03				
Mar. 31, 1965	1200	41	.69				
Feb. 15, 1966	1245	32	.09				
Mar. 15, 1966	1630	40	.31				
Apr. 26, 1966	1115	58	.79				
Jan. 30, 1967	1430	37	.09				
Apr. 3, 1967	1415	62	2.05				
June 20, 1967	1130	73	.17				
Oct. 16, 1967	1310	58	.15				
Dec. 4, 1967	1245	40	1.24				
Jan. 22, 1968	1140	38	.89				
Mar. 6, 1968	0845	38	.07				
Apr. 24, 1968	0835	48	.85				
July 18, 1968	1405	78	1.13				
Nov. 21, 1968	1305	41	.07				
Dec. 9, 1968	1305	36	.28				
Jan. 20, 1969	1230	35	.52				
Feb. 10, 1969	1410	42	1.46				
Mar. 25, 1969	1220	41	.87				
June 9, 1969	1315	70	.07				
Sept. 18, 1969	1445	70	.15				

OSAGE RIVER BASIN

6-9220. South Grand River near Brownington, Mo.

Location.--Lat 38°15'45", long 93°42'50", in NW¼ sec.17, T.40 N., R.25 W., on downstream side of left abutment of county highway bridge, 150 ft downstream from St. Louis-San Francisco Railroad Co., bridge, 200 ft downstream from Deepwater Creek, 1 mile north of Brownington, and at mile 31.5.

Drainage area.--1,660 sq mi, approcimately.

Discharge records available.--July 1921 to September 1969.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 7, 1946	1755	82	4.22
Oct. 17, 1946	1610	64	17.0
Nov. 21, 1946	1200	43	207
Dec. 18, 1946	0750	40	545
Mar. 6, 1947	1240	33	72.0
Sept. 9, 1947	1350	85	.46
Apr. 12, 1948	1255	59	239
July 8, 1948	1035	78	156
Aug. 18, 1948	1030	78	155
Oct. 11, 1948	1445	62	3.70
Nov. 22, 1948	0845	37	31.1
Jan. 4, 1949	0740	34	81.9
June 21, 1949	1350	83	292
July 26, 1949	1400	83	155
Aug. 30, 1949	0810	74	333
Oct. 11, 1949	1545	67	93.5
Oct. 13, 1950	1420	62	30.7
Nov. 15, 1950	1450	50	7.78
Jan. 5, 1951	1125	38	108
Feb. 15, 1951	1530	34	47.8
Mar. 23, 1951	1505	47	414
May 2, 1951	1635	74	580
July 24, 1952	1230	84	16.2
Sept. 4, 1952	1650	74	8.62
Aug. 21, 1953	1010	88	.10
Oct. 8, 1953	0940	60	5.16
Nov. 19, 1953	0950	55	.42
Aug. 26, 1954	0730	79	5.66
Dec. 16, 1954	0740	40	14.0
Oct. 10, 1961	1650	65	141
Jan. 17, 1962	1600	32	650
Aug. 28, 1962	1200	88	.03
Dec. 18, 1962	0905	40	16.2
May 14, 1963	1230	80	55.6
July 23, 1963	1715	86	21.6
Dec. 10, 1963	1615	35	.68
Jan. 21, 1964	1050	39	3.82
Feb. 19, 1964	0805	41	2.51
July 15, 1964	1610	74	243
Aug. 19, 1964	1315	85	1.36
Oct. 8, 1964	1115	59	.62
Nov. 10, 1964	1600	60	29.6
Mar. 3, 1965	1225	32	2,840
Mar. 31, 1965	1710	41	818
Apr. 7, 1965	1810	62	4,680
Apr. 8, 1965	0915	62	6,390
Apr. 27, 1965	1330	61	218
May 25, 1965	1745	77	44.4
July 8, 1965	1545	80	697
Aug. 11, 1965	1545	78	66.3
Oct. 12, 1965	1540	60	70.4
Nov. 24, 1965	1100	49	98.3
Dec. 22, 1965	1015	38	81.2
Feb. 15, 1966	1715	37	363
Mar. 28, 1966	1000	46	179
Apr. 26, 1966	1530	58	2,750
June 6, 1966	1430	69	1,550
Sept. 7, 1966	1100	72	7.40
Oct. 10, 1966	1350	67	6.74
Nov. 7, 1966	1525	54	3.94
Dec. 19, 1966	1605	44	9.63
Jan. 31, 1967	0845	35	288
Feb. 28, 1967	1045	41	23.8
Apr. 4, 1967	1045	62	2,240
May 9, 1967	0820	54	987
June 19, 1967	1355	75	2,070
July 11, 1967	0815	78	228
Aug. 7, 1967	1730	77	198
Sept. 20, 1967	0850	70	18.6
Oct. 17, 1967	0905	58	620
Dec. 5, 1967	1225	39	1,560
Jan. 22, 1968	1630	36	1,420
Mar. 5, 1968	1800	40	128
Apr. 23, 1968	1040	59	3,990
June 10, 1968	1630	80	261
July 22, 1968	1800	84	607
Aug. 27, 1968	0755	72	155
Oct. 2, 1968	1700	71	47.9
Nov. 13, 1968	1610	42	569
Dec. 10, 1968	0945	33	262
Jan. 13, 1969	1140	33	195
Feb. 17, 1969	1550	39	737
Mar. 17, 1969	1330	44	758
May 7, 1969	0755	69	340
June 10, 1969	1040	67	894
July 23, 1969	0940	79	532
Aug. 27, 1969	0840	74	101
Sept. 30, 1969	1320	71	98.2

OSAGE RIVER BASIN

6-9225. Osage River at Warsaw, Mo.

LOCATION.--Lat 38°14'40", long 29°23'10", in NE¼SW¼ sec.17, T.40 N., R.22 W., at Warsaw.

DRAINAGE AREA.--11,500 sq mi.

DISCHARGE RECORDS AVAILABLE.—October 1925 to April 1931 (discontinued). Gage-height records collected in vicinity since March 1917 are contained in reports of U. S. Weather Bureau.

MAXIMUM TEMPERATURE MEASURED.—85° Fahrenheit.

TEMPERATURE (°F) OF WATER, MAY TO SEPTEMBER 1969

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
MAY																																
MAXIMUM	—	—	—	—	—	—	—	—	—	—	—	—	—	72	70	72	70	69	72	71	72	72	69	69	69	70	72	74	80	74	74	—
MINIMUM	—	—	—	—	—	—	—	—	—	—	—	—	—	66	67	68	69	68	69	71	70	69	69	67	66	67	68	68	70	72	72	—
JUNE																																
MAXIMUM	72	70	68	68	68	70	72	74	74	76	76	76	—	—	—	—	—	—	—	—	—	—	—	—	69	—	—	—	—	—	—	—
MINIMUM	70	68	68	67	67	68	70	72	73	73	73	74	74	—	—	—	—	—	—	—	—	—	—	—	69	—	—	—	—	—	—	—
JULY																																
MAXIMUM	—	—	—	—	—	—	79	79	80	80	79	79	79	79	80	83	85	84	83	82	81	82	81	81	82	84	84	81	81	81	80	—
MINIMUM	—	—	—	—	—	—	78	79	79	79	79	79	78	78	79	80	82	83	81	81	80	81	80	80	81	80	80	80	80	79	79	—
AUGUST																																
MAXIMUM	79	79	81	80	81	83	84	84	84	82	82	83	82	82	81	82	81	81	83	82	81	77	79	78	77	76	76	77	79	79	77	80
MINIMUM	78	78	79	79	80	80	81	82	82	81	81	81	81	81	80	80	79	79	79	77	77	75	76	77	76	75	74	74	76	76	75	78
SEPTEMBER																																
MAXIMUM	77	75	75	77	78	81	78	77	76	80	78	80	78	75	74	72	69	67	67	66	66	66	66	67	67	68	68	67	69	70	—	72
MINIMUM	75	74	73	74	75	76	77	76	75	74	74	74	74	73	73	66	67	67	66	66	66	66	66	66	66	66	67	66	67	69	—	70

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp (°F)	Discharge (cfs)
Apr. 7, 1965	1520	62	55,200				
Apr. 8, 1965	1350	61	49,500				
June 18, 1965	1130	74	44,600				
June 19, 1965	1100	72	45,600				

OSAGE RIVER BASIN

6-9227. Chub Creek near Lincoln, Mo.

Location.--Lat 38°26'12", long 93°18'07", in NE¼ sec.12, T.42 N., R.22 W., at culvert under State Highway 65, 3.4 miles north of Lincoln, Benton County.

Drainage area.--2.86 sq mi.

Discharge records available.--Discharge measurements and gage-height record available May 1964 to September 1969. Discharge measurements only August 1957 to April 1964.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Mar. 6, 1967	1500	43	0.20				
Apr. 10, 1967	1355	66	.11				
Jan. 26, 1968	1625	41	.90				
June 14, 1968	1840	82	.07				
July 26, 1968	1700	78	2.05				
Nov. 5, 1968	0940	46	.11				
Feb. 10, 1969	1555	41	1.59				
Mar. 11, 1969	1615	40	1.21				
June 13, 1969	0830	64	.13				
July 24, 1969	1940	78	.09				

OSAGE RIVER BASIN

6-9228. BIG BUFFALO CREEK NEAR STOVER, MO.

LOCATION.--Lat 38°20'04", long 93°05'04", in NE¼SE¼SW¼ sec.12, T.41 N., R.20 W., on right bank, 1½ miles southwest of Roylers Mill, 3 miles upstream from mouth, and 9 miles southwest of Stover.

DRAINAGE AREA.--24.2 sq mi.

DISCHARGE RECORDS AVAILABLE.--March 1965 to September 1969.

TEMPERATURE RECORDS AVAILABLE.--April 1965 to September 1969, continuous ethyl alcohol-actuated thermograph.

MAXIMUM TEMPERATURE MEASURED.--81° Fahrenheit.

TEMPERATURE (°F) OF WATER, APRIL TO SEPTEMBER 1965

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	59	61	63	63	65	62	57	58	57	61	63	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	54	56	57	58	58	56	54	54	54	56	--	--
MAY																																
MAXIMUM	64	66	66	66	66	67	67	67	66	66	66	66	67	66	65	65	67	67	64	68	68	70	76	69	70	68	68	67	67	70	70	67
MINIMUM	57	58	60	62	63	63	64	64	64	63	62	61	62	63	63	63	62	63	64	64	65	65	66	67	67	66	64	64	63	65	66	63
JUNE																																
MAXIMUM	68	70	71	72	72	70	73	71	69	72	73	71	69	69	71	71	70	71	71	72	72	72	70	72	71	72	74	76	76	73	--	71
MINIMUM	67	67	68	68	69	69	68	69	67	67	68	69	68	68	67	67	67	67	67	68	69	69	68	68	68	69	70	71	72	72	--	68
JULY																																
MAXIMUM	72	72	73	72	74	72	76	74	74	76	72	75	76	75	74	72	75	72	71	70	74	76	77	78	77	76	74	76	76	75	74	74
MINIMUM	70	70	70	69	69	70	70	70	72	71	71	71	72	70	68	69	71	71	69	68	69	70	72	73	73	71	72	72	70	69	70	70
AUGUST																																
MAXIMUM	74	74	74	74	75	72	73	72	72	73	73	73	73	74	74	73	74	73	76	75	75	73	73	72	74	75	74	72	70	73	72	73
MINIMUM	69	69	68	70	70	68	67	68	67	67	68	68	68	69	69	70	71	72	72	72	73	72	72	70	69	72	69	69	68	69	70	70
SEPTEMBER																																
MAXIMUM	71	71	70	69	70	71	72	73	73	73	71	71	72	72	72	70	72	73	72	72	72	69	67	64	62	64	64	65	66	66	--	70
MINIMUM	68	68	69	68	68	69	70	70	71	71	70	69	70	70	68	68	69	70	71	71	69	67	65	62	60	62	63	62	64	64	--	68

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	64	64	64	62	62	62	60	60	60	61	60	59	59	58	60	60	63	63	61	61	59	58	57	55	55	56	55	56	55	56	56	59
MINIMUM	62	61	62	62	61	60	58	59	58	58	58	56	57	58	58	60	60	60	61	59	58	57	55	53	52	53	52	54	53	53	55	58
NOVEMBER																																
MAXIMUM	55	56	55	55	55	57	56	57	55	53	55	55	53	52	54	55	52	53	52	52	53	52	52	52	53	55	52	50	48	47	—	53
MINIMUM	53	53	54	54	55	55	55	55	53	52	53	53	52	52	52	52	51	51	51	51	52	51	50	52	51	52	50	48	47	45	—	52
DECEMBER																																
MAXIMUM	47	48	49	49	49	48	47	48	49	51	53	53	49	49	47	47	46	45	45	45	45	46	47	48	47	44	44	43	46	49	49	47
MINIMUM	45	47	48	47	48	47	45	47	47	49	51	49	49	47	47	46	44	44	44	44	43	44	46	47	44	43	43	42	43	46	49	46
JANUARY																																
MAXIMUM	50	49	47	44	45	45	44	43	45	45	45	45	45	44	44	44	43	42	42	42	42	42	41	41	41	42	40	40	39	39	39	43
MINIMUM	49	47	44	44	43	44	43	41	42	44	44	45	44	43	43	43	42	41	40	41	41	41	40	40	40	40	40	39	38	38	38	42
FEBRUARY																																
MAXIMUM	39	40	40	39	40	40	42	43	43	43	43	43	42	41	41	41	41	42	41	40	39	39	40	41	42	42	42	41	--	--	--	41
MINIMUM	37	38	38	38	38	40	40	42	41	41	41	40	40	40	39	40	39	39	40	38	38	37	37	39	39	40	41	41	--	--	--	39
MARCH																																
MAXIMUM	43	43	47	44	40	40	42	44	44	45	45	46	47	47	48	50	52	51	50	51	55	54	54	49	51	49	47	50	51	53	55	48
MINIMUM	39	42	43	40	39	36	38	40	43	43	45	45	43	45	45	46	48	49	46	46	50	52	48	45	45	47	47	45	47	47	49	45
APRIL																																
MAXIMUM	54	53	54	52	49	51	53	52	53	53	53	49	50	55	56	55	60	54	62	58	55	58	54	58	60	57	62	60	61	59	—	55
MINIMUM	51	50	52	49	48	47	48	49	48	48	49	49	49	47	49	50	51	54	54	49	47	49	53	54	54	56	56	55	55	55	—	51
MAY																																
MAXIMUM	58	62	65	65	67	67	67	67	63	58	57	57	57	63	59	66	69	65	61	65	62	68	65	66	65	68	69	69	69	68	68	64
MINIMUM	54	51	55	57	57	58	59	60	57	55	56	57	55	53	57	58	61	61	58	57	61	59	62	60	59	61	61	62	62	63	61	58
JUNE																																
MAXIMUM	67	64	63	64	69	69	65	68	66	68	69	71	69	70	70	68	67	70	71	72	72	72	72	74	75	76	75	72	76	76	—	70
MINIMUM	60	63	61	61	63	64	63	63	63	61	62	65	66	64	65	65	64	63	64	65	65	66	67	67	68	69	69	69	69	69	—	65
JULY																																
MAXIMUM	76	76	77	77	78	78	76	78	78	80	80	81	81	81	79	76	79	81	80	79	78	77	74	76	78	77	78	77	75	77	78	78
MINIMUM	70	70	70	70	71	72	72	71	72	72	72	73	73	73	74	74	73	74	74	74	72	72	73	72	73	73	73	73	73	72	71	72
AUGUST																																
MAXIMUM	76	77	76	75	76	78	75	76	73	71	73	72	72	74	75	76	72	73	74	75	73	72	71	71	71	72	72	71	73	73	73	74
MINIMUM	72	72	71	70	70	70	71	70	70	69	67	68	69	69	70	71	71	70	69	71	71	68	67	66	67	67	67	67	67	68	69	69
SEPTEMBER																																
MAXIMUM	73	73	73	74	73	72	71	71	70	70	71	70	71	69	69	65	66	65	64	67	67	67	67	67	65	64	63	64	65	62	--	68
MINIMUM	69	69	69	69	67	68	66	66	66	65	65	67	66	67	65	63	63	64	64	63	62	63	62	61	62	63	63	61	61	59	—	65

6-9228. BIG BUFFALO CREEK NEAR STOVER, MO.

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	61	62	65	62	61	61	62	60	65	62	61	61	64	65	60	58	55	55	57	57	58	58	57	57	57	59	59	59	58	58	55	59
MINIMUM	57	57	60	59	57	55	58	59	59	57	56	57	60	60	57	54	53	55	54	51	53	55	52	52	52	52	53	53	54	53	53	55
NOVEMBER																																
MAXIMUM	53	51	51	50	52	53	57	59	57	53	53	51	52	53	53	54	55	54	52	51	54	56	57	56	56	55	55	51	51	51	—	53
MINIMUM	50	48	47	48	49	48	52	55	53	50	49	49	48	49	50	50	52	52	50	49	51	53	55	55	55	55	50	49	48	48	—	50
DECEMBER																																
MAXIMUM	48	46	47	48	50	52	52	52	50	48	46	45	46	46	45	46	47	47	47	47	48	45	44	43	44	44	43	43	42	43	42	46
MINIMUM	46	45	44	46	48	50	51	50	48	45	43	43	43	43	43	44	43	44	45	44	44	43	41	40	40	42	42	40	39	39	41	43
JANUARY																																
MAXIMUM	44	44	43	44	44	44	41	42	42	41	41	43	44	43	42	42	40	39	40	42	45	48	49	51	46	43	41	41	43	43	44	43
MINIMUM	41	40	40	40	41	41	39	39	38	39	38	40	42	40	39	38	37	36	36	38	40	43	44	46	42	39	39	38	39	41	41	39
FEBRUARY																																
MAXIMUM	45	43	42	44	44	42	41	42	43	45	44	45	46	48	47	41	43	42	45	43	44	44	42	42	42	40	43	45	—	—	—	43
MINIMUM	43	42	41	41	41	39	38	39	38	41	41	40	40	43	41	39	40	40	41	39	38	39	38	37	37	39	40	39	—	—	—	39
MARCH																																
MAXIMUM	47	51	46	44	43	45	43	45	48	54	52	54	53	49	48	49	46	46	44	46	51	53	56	58	54	53	51	56	60	61	56	50
MINIMUM	41	43	44	43	42	41	39	38	39	44	46	47	47	46	45	42	42	41	43	44	43	46	46	49	51	51	50	50	50	54	55	45
APRIL																																
MAXIMUM	60	61	58	62	64	65	61	62	64	63	61	57	57	62	64	65	63	63	62	62	60	60	55	59	52	51	59	61	55	62	—	60
MINIMUM	54	54	53	52	54	57	53	54	58	55	52	53	56	55	54	57	56	53	53	55	56	53	50	48	51	50	48	49	53	55	—	53
MAY																																
MAXIMUM	62	60	59	61	55	53	58	59	62	58	61	56	54	54	58	59	63	64	63	57	64	64	65	67	68	69	69	70	67	66	65	61
MINIMUM	53	51	49	50	53	52	51	53	52	55	56	53	53	52	50	52	52	54	57	54	54	54	54	57	59	59	60	63	64	64	61	54
JUNE																																
MAXIMUM	61	67	69	70	66	70	70	73	73	71	70	73	74	73	73	71	69	70	72	69	68	69	69	68	66	69	69	67	66	69	—	69
MINIMUM	61	60	60	60	63	63	65	65	67	67	66	67	67	67	67	67	66	65	66	67	66	64	65	66	64	63	66	66	65	64	—	64
JULY																																
MAXIMUM	70	70	69	69	67	69	69	68	71	72	70	70	70	70	70	70	69	69	70	72	72	72	74	74	72	74	72	72	74	75	75	70
MINIMUM	66	67	66	65	66	64	64	65	66	67	68	68	67	65	65	65	65	66	66	66	67	68	68	69	69	69	70	69	69	69	70	66
AUGUST																																
MAXIMUM	73	75	76	74	73	71	73	70	70	70	70	71	72	72	72	73	73	71	71	71	72	72	73	73	73	71	71	71	72	72	70	71
MINIMUM	70	70	71	70	69	69	69	70	69	68	67	67	67	67	67	68	69	69	69	67	67	68	68	68	68	68	66	65	66	69	65	68
SEPTEMBER																																
MAXIMUM	69	69	68	69	69	70	70	70	70	70	69	69	67	69	68	67	68	69	68	68	69	68	68	67	69	68	66	63	62	63	—	67
MINIMUM	65	66	65	66	66	65	66	67	66	65	65	65	67	67	67	66	66	66	66	66	66	65	64	64	64	66	63	61	59	59	—	64

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	64	65	66	66	65	64	64	63	62	60	59	60	61	61	61	60	60	58	58	58	58	59	59	59	56	55	54	55	55	53	53	60
MINIMUM	61	62	62	63	64	64	63	61	59	58	57	56	59	57	59	59	58	56	55	55	55	55	57	56	54	53	52	53	52	52	52	57
NOVEMBER																																
MAXIMUM	53	52	51	49	48	49	49	50	51	52	53	52	51	50	50	51	51	50	49	50	51	49	48	49	50	48	47	46	46	47	—	50
MINIMUM	52	51	49	48	47	46	46	46	49	50	51	50	50	48	48	48	49	48	47	49	49	47	46	47	47	47	45	45	46	46	—	48
DECEMBER																																
MAXIMUM	48	47	45	45	46	49	47	45	47	47	45	45	44	44	43	43	45	44	45	47	47	42	40	42	42	40	40	40	41	41	41	44
MINIMUM	46	44	43	43	45	46	45	44	45	45	44	44	44	43	42	42	43	43	42	44	42	40	39	40	40	38	40	40	40	40	37	42
JANUARY																																
MAXIMUM	38	39	38	38	38	38	37	36	39	38	38	38	37	38	39	39	40	40	41	42	43	43	41	39	41	43	46	46	46	44	46	40
MINIMUM	37	38	38	37	37	36	36	36	36	37	37	37	36	36	38	38	37	39	39	40	41	40	38	38	39	39	43	45	44	44	44	39
FEBRUARY																																
MAXIMUM	46	44	43	44	44	42	41	41	41	40	39	40	40	39	41	42	40	39	42	41	40	40	40	40	40	40	43	42	42	—	—	41
MINIMUM	44	42	41	43	42	41	40	38	39	38	37	38	37	37	33	38	38	38	39	40	38	38	38	38	39	40	40	40	39	—	—	39
MARCH																																
MAXIMUM	43	40	42	43	46	46	46	50	47	49	44	42	46	48	44	49	50	49	49	48	47	46	47	50	53	54	52	55	57	58	55	48
MINIMUM	38	40	38	38	40	40	40	43	44	44	42	40	39	41	43	43	44	47	48	43	43	42	41	41	44	46	49	48	50	53	51	43
APRIL																																
MAXIMUM	55	53	55	53	53	55	58	57	56	59	59	59	59	—	—	—	—	—	—	—	—	—	—	—	58	59	59	57	62	63	—	57
MINIMUM	47	51	52	48	47	47	49	50	50	50	51	52	52	—	—	—	—	—	—	—	—	—	—	—	52	54	53	53	58	54	—	51
MAY																																
MAXIMUM	65	65	64	63	63	62	58	63	61	59	57	60	61	63	61	64	62	61	60	60	62	57	56	58	58	57	59	61	62	61	61	61
MINIMUM	56	57	59	57	56	56	56	56	58	57	57	55	58	59	60	59	59	57	57	57	56	55	56	56	57	57	55	57	58	58	59	57
JUNE																																
MAXIMUM	61	65	66	66	66	68	69	69	69	70	71	71	71	72	72	69	71	71	72	73	73	73	73	71	71	70	70	72	73	71	—	70
MINIMUM	60	60	61	62	63	64	65	65	66	66	67	68	67	69	69	68	68	68	68	69	69	70	70	71	70	68	67	67	69	70	—	67
JULY																																
MAXIMUM	71	72	72	72	72	71	72	73	73	74	74	73	74	74	73	75	74	75	76	75	75	75	75	74	74	73	74	72	73	72	71	73
MINIMUM	70	69	68	67	68	69	69	69	70	70	70	70	70	71	71	72	72	71	72	71	71	72	72	72	72	72	71	71	70	69	69	70
AUGUST																																
MAXIMUM	69	69	72	72	73	74	74	75	72	72	71	71	73	72	73	75	75	75	77	77	77	77	77	76	75	76	76	74	73	72	72	74
MINIMUM	68	68	68	69	70	70	71	71	72	71	70	71	71	71	71	71	72	73	74	74	74	74	74	75	72	73	73	72	72	71	71	72
SEPTEMBER																																
MAXIMUM	74	73	72	69	69	69	69	68	67	67	68	68	68	68	67	68	67	66	67	68	67	67	67	67	66	66	67	67	67	67	—	68
MINIMUM	69	69	69	68	67	66	66	66	66	64	63	63	63	64	64	66	65	64	65	64	65	66	66	66	65	64	64	64	64	64	—	65

OSAGE RIVER BASIN—Continued

6-9228. BIG BUFFALO CREEK NEAR STOVER, MO.

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

MONTH	DAY 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	66	66	64	63	61	61	61	62	61	60	61	60	60	64	64	64	64	60	60	60	61	61	59	59	57	58	57	56	56	57	57	61
MINIMUM	63	64	62	60	60	60	59	59	59	57	57	59	60	60	62	62	60	58	57	57	58	59	58	57	55	55	56	55	53	54	56	58
NOVEMBER																																
MAXIMUM	56	56	54	51	51	50	50	50	49	48	48	48	47	49	51	49	49	49	47	46	47	47	48	48	48	47	47	47	45	45	—	49
MINIMUM	56	54	51	49	50	50	50	49	47	48	47	46	46	47	49	49	49	47	46	44	44	45	47	47	46	47	47	45	44	43	—	48
DECEMBER																																
MAXIMUM	45	47	47	45	44	44	43	43	43	43	44	46	45	42	41	42	42	44	43	41	42	42	40	40	40	43	45	43	41	41	39	43
MINIMUM	44	45	44	43	43	42	42	41	42	42	42	44	42	40	40	40	41	42	42	40	42	40	39	39	40	40	43	40	40	39	36	41
JANUARY																																
MAXIMUM	37	38	38	37	38	39	38	39	38	37	38	37	35	39	39	41	39	39	40	40	41	43	43	39	38	38	38	39	39	38	38	39
MINIMUM	36	37	37	36	37	37	37	38	36	36	36	37	37	38	39	39	39	39	39	38	40	41	39	37	37	35	36	38	37	38	37	38
FEBRUARY																																
MAXIMUM	39	39	38	39	39	40	42	42	40	41	41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MINIMUM	37	38	37	37	38	39	40	40	40	38	39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MARCH																																
MAXIMUM	—	—	—	—	—	44	45	44	44	42	42	41	42	42	43	44	46	48	50	49	49	50	49	48	45	48	45	46	47	46	46	46
MINIMUM	—	—	—	—	—	42	42	41	41	39	39	39	39	39	39	40	40	43	44	46	44	46	48	45	44	43	44	44	43	43	44	42
APRIL																																
MAXIMUM	50	52	51	54	54	54	55	54	58	56	57	57	56	54	57	61	59	58	59	61	63	62	62	63	64	63	62	61	64	63	—	58
MINIMUM	45	49	49	50	49	48	49	51	53	53	51	52	54	53	52	55	58	54	53	54	57	56	57	56	57	60	59	57	56	58	--	54
MAY																																
MAXIMUM	65	67	68	68	68	69	67	67	66	64	64	66	66	67	67	68	66	65	66	66	65	65	63	62	66	67	68	67	67	67	66	66
MINIMUM	59	59	62	63	65	65	65	63	61	62	60	61	63	63	64	65	65	64	64	64	64	63	62	62	61	64	64	64	64	65	65	63
JUNE																																
MAXIMUM	66	66	65	66	67	69	70	68	68	67	69	68	67	67	66	66	66	66	66	66	66	67	70	68	68	73	74	73	74	72	—	68
MINIMUM	65	63	62	63	64	65	66	66	66	66	66	67	66	65	64	64	64	64	65	66	65	65	65	66	66	68	69	69	70	70	—	66
JULY																																
MAXIMUM	72	71	72	74	73	74	75	74	74	74	73	74	75	75	75	76	76	74	74	73	73	74	74	73	76	76	76	74	73	73	73	74
MINIMUM	70	68	68	69	70	71	71	72	72	72	71	72	72	73	73	73	73	73	73	73	72	72	73	73	73	73	73	73	71	71	72	72
AUGUST																																
MAXIMUM	73	72	73	73	73	74	74	75	74	74	74	74	73	73	71	71	71	72	73	73	73	73	73	72	72	73	73	73	73	74	74	73
MINIMUM	72	71	71	70	71	72	72	73	73	72	72	72	72	71	71	71	70	70	71	71	72	71	70	70	71	71	71	72	72	72	72	71
SEPTEMBER																																
MAXIMUM	73	72	72	73	73	74	73	73	72	72	72	72	70	70	70	69	68	67	67	67	66	67	67	67	66	65	64	64	65	65	—	69
MINIMUM	72	72	72	72	72	72	70	70	70	68	69	69	69	70	69	68	67	65	65	65	66	67	66	65	64	63	64	62	62	63	--	68

OSAGE RIVER BASIN

6-9230. Niangua Branch at Marshfield, Mo.

Location.--Lat 37°20'50", long 92°54'45", in SE¼NE¼ sec.4, T.30 N., R.18 W., on right bank at upstream end of culvert on county highway, 400 ft northwest of junction of county highway and U. S. Highway 66 (old) at north edge of Marshfield.

Drainage area.--0.82 sq mi.

Discharge records available.--July 1950 to September 1957 (discontinued).. Discharge measurements and daily gage-height record available from October 1957 to September 1959. Discharge measurements only October 1959 to September 1969.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 31, 1950	1610	83	0.17				
Dec. 27, 1950	0945	34	.05				
Feb. 17, 1951	1600	35	9.72				
Feb. 26, 1951	1615	60	1.20				
Mar. 12, 1951	1130	44	2.73				
June 6, 1951	1720	65	.44				
July 31, 1951	1630	79	.50				
Aug. 7, 1952	0545	77	.08				
Sept. 25, 1952	1315	67	.07				
Nov. 8, 1952	1030	53	.08				
Mar. 28, 1953	0925	50	.19				
May 2, 1953	0715	66	.51				
July 11, 1953	0840	70	.04				
Dec. 15, 1954	0930	40	.24				

OSAGE RIVER BASIN

6-9240. Niangua River near Decaturville, Mo.

Location.--Lat 37°56'20", long 92°50'30", in NW¼NE¼ sec.19, T.37 N., R.17 W., on right bank 0.3 mile downstream from Hydroelectric plant of Sho-Me Power Cooperative Inc., 8 miles northwest of Decaturville, and at mile 22.

Drainage area.--627 sq mi.

Discharge records available.--October 1929 to September 1969. Prior to April 1930 monthly discharge only, published in WSP 1310.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 16, 1945	1430	55	808
Oct. 15, 1946	1435	62	6.89
Oct. 16, 1946	0825	59	291
Mar. 4, 1947	1445	41	210
Aug. 3, 1947	0810	83	264
Sept. 8, 1947	1430	82	260
Nov. 5, 1947	0955	56	285
Dec. 7, 1947	0710	44	23.6
Jan. 18, 1948	1410	36	30.0
July 24, 1948	1620	77	693
Oct. 13, 1948	0810	60	319
Nov. 23, 1948	0955	37	432
May 3, 1949	0635	70	48.5
June 21, 1950	0620	71	48.0
Jan. 4, 1951	1010	41	335
July 23, 1952	0900	82	331
Oct. 15, 1952	1430	58	284
Dec. 10, 1952	1550	47	401
July 11, 1953	1725	70	24.1
Aug. 20, 1953	0630	67	25.5
Oct. 8, 1953	1405	64	307
Nov. 20, 1953	0935	53	396
Jan. 8, 1954	1105	41	311
June 18, 1954	0910	84	302
Nov. 19, 1954	1145	53	385
Dec. 17, 1954	1115	40	304
Jan. 17, 1955	1340	41	413
Feb. 15, 1961	0945	44	208
June 28, 1961	1010	74	347
Sept. 5, 1961	1140	75	318
Sept. 19, 1961	0840	66	39.3
Oct. 9, 1961	1600	65	49.5
Mar. 3, 1962	0930	41	528
Aug. 27, 1962	1245	78	305
Oct. 5, 1962	0945	64	399
Apr. 8, 1963	1145	61	30.4
June 17, 1963	1230	70	2,770
July 25, 1963	1700	84	163
Oct. 4, 1963	1115	67	124
Dec. 9, 1963	1220	61	371
Jan. 20, 1964	1050	38	26.7
Feb. 19, 1964	1410	42	447
May 4, 1964	1505	71	424
June 1, 1964	1030	69	457
Aug. 18, 1964	1115	72	281
Oct. 12, 1964	1630	59	47.1
Oct. 13, 1964	0715	58	30.1
Feb. 22, 1965	1100	45	37.9
Apr. 2, 1965	1105	43	244
Apr. 26, 1965	1230	63	384
May 24, 1965	1230	76	290
July 16, 1965	1140	75	711
Sept. 13, 1965	1200	72	460
Nov. 22, 1965	1035	52	37.9
Dec. 20, 1965	1200	44	315
Feb. 8, 1966	1700	37	126
July 27, 1966	1020	82	43.0
Aug. 30, 1966	1110	75	401
Nov. 8, 1966	1055	58	55.9
Dec. 15, 1966	1620	41	364
Jan. 25, 1967	1500	49	312
Mar. 2, 1967	1610	46	362
Apr. 11, 1967	0940	65	43.8
May 12, 1967	0845	64	278
June 5, 1967	1330	72	424
Aug. 11, 1967	1505	76	228
Sept. 25, 1967	1315	69	392
Oct. 24, 1967	1445	56	472
Dec. 11, 1967	1600	42	3,860
Jan. 26, 1968	1310	39	353
Mar. 4, 1968	1230	43	361
Apr. 22, 1968	1250	60	1,140
June 14, 1968	1110	77	522
July 26, 1968	1125	82	272
Aug. 29, 1968	1115	81	452
Sept. 30, 1968	1435	70	296
Nov. 5, 1968	1330	54	3,080
Dec. 13, 1968	0755	39	64.6
Jan. 21, 1969	1105	45	1,010
Mar. 21, 1969	1215	53	339
June 12, 1969	1525	68	333
July 24, 1969	1430	76	256
Aug. 29, 1969	0840	77	293

OSAGE RIVER BASIN

6-9252. Starks Creek at Preston, Mo.

Location.--Lat 37°56'30", long 93°11'30", on line between NW¼ and SW¼ sec.24, T.37 N., R.21 W., on right bank at bridge on U. S. Highway 54, 0.6 mile east of Preston.

Drainage area.--4.19 sq mi (revised).

Discharge records available.--July 1956 to September 1959 (discontinued). Discharge measurements and daily gage-height record available to September 1969.

Maximum temperature measured.-80° Fahrenheit.

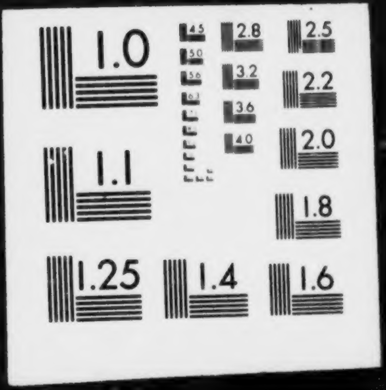
Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 20, 1961	1035	39	1.19				
Mar. 28, 1961	1150	57	1.76				
Oct. 10, 1961	0810	66	.01				
Nov. 20, 1961	1230	45	1.38				
Dec. 18, 1961	1020	38	10.8				
Mar. 1, 1962	1630	34	2.54				
Oct. 4, 1962	1655	66	1.34				
June 17, 1963	1435	75	.18				
Apr. 28, 1964	1840	61	2.23				
June 1, 1964	1130	67	.35				
July 13, 1964	1840	72	.90				
Feb. 22, 1965	1405	41	.22				
Mar. 29, 1965	1500	42	1.52				
Apr. 26, 1965	1500	61	1.19				
Sept. 13, 1965	1450	74	1.11				
Oct. 11, 1965	1500	59	1.05				
Nov. 30, 1965	1445	40	.43				
Mar. 24, 1966	1310	50	.98				
May 5, 1966	0630	56	1.91				
June 8, 1966	1430	73	5.29				
Mar. 3, 1967	1430	48	.19				
Apr. 11, 1967	1750	64	.12				
May 12, 1967	1225	61	.29				
June 6, 1967	0930	69	.35				
Oct. 20, 1967	1130	56	.77				
Dec. 8, 1967	1350	45	4.02				
Jan. 26, 1968	1000	36	1.31				
Apr. 22, 1968	1550	64	1.14				
June 13, 1968	1745	80	.36				
July 25, 1968	0925	70	163				
Nov. 6, 1968	0945	50	.33				
Dec. 13, 1968	1020	37	.75				
Jan. 21, 1969	0905	42	4.34				
Feb. 12, 1969	0855	33	1.71				
Mar. 21, 1969	0825	41	1.09				
May 2, 1969	1115	68	1.45				

3 OF 4

PB

255144


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6

OSAGE RIVER BASIN

6-9260. Osage River near Bagnell, Mo.

Location.--Lat 38°12'26", long 92°35'23", in N½SE¼ sec.21, T.40 N., R.15 W., on left bank 1½ miles upstream from Bagnell, 3 miles downstream from Hydroelectric plant of Union Electric Co., of Missouri, and at mile 78.5.

Drainage area.--14,000 sq mi, approximately.

Discharge records available.--October 1880 to September 1969. Monthly discharge only for some periods published in WSP 1310. Gage-height records collected in this vicinity 1880-1931 are contained in reports of Missouri River Commission or U. S. Weather Bureau.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 19, 1947	1120	46	414				
Jan. 8, 1954	1430	51	292				
June 18, 1961	1045	69	249				
July 23, 1961	1400	70	215				
Aug. 27, 1961	1040	72	283				
Dec. 10, 1961	1045	45	291				
Apr. 29, 1962	0945	62	286				
Feb. 17, 1963	1100	42	280				
May 5, 1963	1205	78	800				
June 9, 1963	1345	67	346				
Oct. 20, 1963	1410	69	290				
Dec. 1, 1963	1125	54	1,040				
Aug. 9, 1964	1045	62	326				
Oct. 18, 1964	1045	61	314				
Jan. 10, 1965	1205	43	423				
Mar. 21, 1965	1335	40	26,800				
May 9, 1965	1300	61	384				
June 20, 1965	1400	70	34,200				
Aug. 1, 1965	1000	69	338				
Sept. 19, 1965	0945	70	4,910				
Dec. 11, 1965	1600	56	251				
Jan. 23, 1966	1200	40	382				
Feb. 27, 1966	1205	49	346				
Dec. 15, 1966	1430	49	259				
Jan. 25, 1967	0825	40	284				
Apr. 5, 1967	1620	50	13,400				
May 12, 1967	0825	55	3,850				
June 12, 1967	1210	66	28,800				
June 13, 1967	1420	68	27,600				
Aug. 31, 1967	1230	73	347				
Nov. 9, 1967	1540	57	28,700				
Apr. 12, 1968	1105	53	7,470				
Sept. 4, 1968	1115	71	402				
July 7, 1969	1515	77	47,800				
Sept. 2, 1969	1320	77	3,000				

OSAGE RIVER BASIN

6-9262. Van Cleve Branch near Meta, Mo.

Location.--Lat 38°13'35", long 92°09'40", in SE¼NE¼ sec.8, T.40 N., R.11 W., 20 ft upstream from concrete culvert on State Highway 133 and 6.5 miles south of Meta.

Drainage area.--0.75 sq mi.

Discharge records available.--August 1956 to September 1959 (discontinued). Discharge measurements and daily gage-height record available to September 1969.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 14, 1957	0915	32	0				
Mar. 20, 1961	0845	42	.49				
Sept. 11, 1962	1610	78	0				
Oct. 18, 1962	0935	62	.02				
Jan. 2, 1963	1150	39	.05				
Apr. 15, 1963	1020	57	.10				
May 20, 1963	1030	66	.28				
June 24, 1963	1000	73	.20				
May 4, 1964	0825	65	.21				
June 8, 1964	1200	74	.04				
Feb. 15, 1965	0830	33	.09				
Mar. 8, 1965	0930	34	.34				
Apr. 9, 1965	1250	65	.51				
Jan. 11, 1966	1000	35	.28				
Feb. 15, 1966	1015	35	.54				
June 5, 1967	1555	70	.28				
Feb. 26, 1968	1050	36	.18				
Apr. 10, 1968	0955	53	.39				
Feb. 5, 1969	0910	35	.70				
Mar. 11, 1969	1535	41	.76				
July 8, 1969	0925	71	1.11				

OSAGE RIVER BASIN

6-9265. Osage River near St. Thomas, Mo.

Location.--Lat 38°20'25", long 92°13'25", in SE¼SW¼ sec.35, T.42 N., R.12 W., on left bank 0.5 mile downstream from Sugar Creek, 2½ miles south of St. Thomas, and at mile 43.1.

Drainage area.--14,500 sq mi, approximately.

Discharge records available.--August 1931 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
June 23, 1950	1625	74	6,510				
Dec. 13, 1950	1600	44	3,120				
July 8, 1952	1130	79	856				
Aug. 6, 1952	0835	80	710				
Oct. 23, 1952	1210	62	460				
June 16, 1953	1150	71	1,160				
Oct. 28, 1953	1255	56	1,810				
Feb. 11, 1954	1130	47	569				
Mar. 11, 1954	0900	47	571				
Jan. 14, 1957	1010	32	612				
Feb. 11, 1957	1230	42	1,000				
Feb. 13, 1961	1045	53	602				
Aug. 14, 1961	1035	71	568				
Nov. 28, 1961	1400	45	27,600				
June 9, 1962	0935	76	620				
Oct. 16, 1962	1245	66	---				
Oct. 18, 1962	1155	67	1,000				
Nov. 26, 1962	1130	50	559				
Jan. 2, 1963	1400	40	584				
Apr. 15, 1963	1340	60	577				
May 20, 1963	1555	64	1,010				
June 24, 1963	1305	76	593				
Sept. 5, 1963	1325	76	984				
Oct. 7, 1963	1640	70	493				
Jan. 15, 1964	1305	34	524				
May 4, 1964	1010	66	797				
June 9, 1964	1200	70	27,600				
Oct. 5, 1964	1250	65	413				
Nov. 23, 1964	1515	49	1,070				
Jan. 4, 1965	1035	44	831				
Feb. 15, 1965	1045	38	859				
Apr. 7, 1965	1000	45	52,800				
June 3, 1965	1050	72	8,160				
June 24, 1965	0810	75	42,700				
Feb. 15, 1966	1530	37	13,800				
Mar. 23, 1966	1545	44	6,030				
Apr. 27, 1966	1415	60	30,000				
June 6, 1966	1400	76	684				
Aug. 22, 1966	1110	78	819				
Sept. 22, 1966	1123	65	578				
Oct. 31, 1966	1150	58	837				
Dec. 12, 1966	1615	42	619				
Jan. 23, 1967	1105	47	576				
Feb. 28, 1967	1200	41	3,200				
Apr. 5, 1967	1125	49	9,570				
May 11, 1967	1645	60	7,170				
June 14, 1967	0830	67	15,100				
July 11, 1967	1440	70	19,300				
Aug. 28, 1967	1225	79	525				
Oct. 3, 1967	1420	68	1,870				
Nov. 9, 1967	1105	55	28,900				
Feb. 27, 1968	1010	37	10,700				
Apr. 10, 1968	1405	51	11,200				
July 8, 1968	1555	82	515				
Sept. 3, 1968	1420	78	562				
Dec. 16, 1968	1420	42	2,140				
Mar. 11, 1969	1340	38	7,490				
May 8, 1969	1315	59	7,080				
May 22, 1969	1145	64	4,700				
July 8, 1969	1130	76	47,700				
Sept. 4, 1969	1040	77	6,000				

GASCONADE RIVER BASIN

6-9277. Gasconade River near Nebo, Mo.

Location.—SW¼ sec.3, T.33 N., R.13 W., at bridge on State Highway 32, 2 miles northwest of Nebo, Laclede County.

Drainage area.—Not determined.

Discharge records available.—Discharge measurements only.

Maximum temperature measured.—83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 4, 1945	1615	80	42.0				
July 23, 1946	1215	83	46.8				
Jan. 29, 1947	0800	46	217				
Sept. 11, 1947	1030	80	33.7				
Sept. 15, 1952	1145	67	48.0				
Aug. 2, 1962	1405	80	49.9				
Sept. 3, 1963	1140	77	31.1				
Sept. 30, 1963	0930	61	25.8				
Oct. 4, 1963	1230	53	28.6				
Sept. 5, 1967	1250	68	29.1				

6-9278. Osage Fork at Drynob, Mo.

Location.--Lat 37°38'00", long 92°27'12", in NW¼NE¼ sec.27, T.34 N., R.14 W., on downstream end of right bridge pier on State Highway 32, 0.1 mile downstream from Walker Hollow, 0.6 mile southwest of Drynob, 1.6 mile upstream from Core Creek, and 12 miles southeast of Lebanon.

Drainage area.--404 sq mi.

Discharge records available.--August 1962 to September 1969.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 4, 1945	1500	79	39.7				
July 23, 1946	1045	83	50.0				
Jan. 29, 1947	1005	47	143				
Sept. 15, 1952	1005	65	40.9				
Sept. 18, 1953	1340	74	15.1				
Aug. 2, 1962	1425	78	35.2				
Feb. 26, 1963	1315	38	36.2				
Apr. 1, 1963	1715	64	164				
May 6, 1963	1745	71	68.9				
June 10, 1963	1300	82	115				
Oct. 29, 1963	1115	60	19.6				
Dec. 4, 1963	0935	40	22.0				
Jan. 6, 1964	1315	37	25.6				
Feb. 12, 1964	0905	39	26.4				
Mar. 17, 1964	0920	57	98.2				
Apr. 20, 1964	1310	68	98.3				
May 27, 1964	1120	79	36.8				
July 10, 1964	1330	74	47.3				
Sept. 14, 1964	1335	70	17.1				
Oct. 6, 1964	1130	59	19.3				
Dec. 18, 1964	1025	34	29.3				
Jan. 22, 1965	1345	41	64.8				
Mar. 29, 1965	1140	47	104				
Apr. 12, 1965	1550	63	582				
Apr. 21, 1965	1530	64	323				
May 24, 1965	1435	76	83.2				
July 9, 1965	1550	76	262				
Aug. 9, 1965	1530	76	116				
Oct. 15, 1965	0845	69	83.1				
Nov. 26, 1965	1540	57	59.4				
Dec. 20, 1965	1310	40	69.4				
Feb. 7, 1966	1455	34	184				
Feb. 15, 1966	0900	43	784				
Mar. 27, 1966	0930	48	209				
Apr. 21, 1966	1115	53	1,880				
June 22, 1966	0840	73	87.9				
July. 27, 1966	1335	82	73.6				
Aug. 30, 1966	1400	78	43.0				
Sept. 27, 1966	1300	63	1,050				
Nov. 8, 1966	1255	56	58.4				
Dec. 13, 1966	1115	39	177				
Jan. 26, 1967	0950	47	106				
Feb. 21, 1967	1040	39	131				
Mar. 29, 1967	1010	60	192				
July 20, 1967	1105	74	93.4				
Aug. 22, 1967	0940	71	34.9				
Oct. 11, 1967	1125	55	183				
Dec. 4, 1967	1135	45	224				
Jan. 31, 1968	0955	47	2,520				
Mar. 28, 1968	1610	59	461				
June 19, 1968	1000	75	107				
Oct. 21, 1968	1040	57	50.6				
Dec. 13, 1968	1020	42	197				
Jan. 30, 1969	1400	34	15,400				
Apr. 30, 1969	1250	59	382				
July 9, 1969	1150	75	66.6				
Aug. 25, 1969	1145	74	67.4				

OSAGE RIVER BASIN

6-9270. Maries River at Westphalia, Mo.

Location.--Lat 38°25'55", long 91°59'20", in NE¼ sec.35, T.43 N., R.10 W., on right bank 200 ft upstream from bridge on U. S. Highway 63, three-quarters of a mile southeast of Westphalia, 1¼ miles downstream from Little Maries Creek, and at mile 9.9.

Drainage area.--257 sq mi.

Discharge records available.--December 1947 to September 1969.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 6, 1948	0955	37	320
Feb. 28, 1948	1630	50	367
Apr. 29, 1949	09[illegible]0	62	62.5
May 17, 1949	1130	73	28.4
May 26, 1949	1235	68	153
Oct. 5, 1949	1010	70	39.0
Nov. 22, 1949	1625	43	23.9
Apr. 20, 1950	1700	57	110
Aug. 18, 1950	1000	73	145
Sept. 19, 1950	1115	72	19.7
Oct. 26, 1950	0935	62	11.5
Dec. 11, 1950	1540	35	16.0
Feb. 28, 1951	1315	54	132
June 5, 1951	1055	64	61.2
July 31, 1951	0945	83	37.0
Feb. 21, 1952	0815	39	81.4
Aug. 6, 1952	1310	79	167
Sept. 10, 1952	1145	70	7.15
Oct. 24, 1952	0830	48	1.44
May 21, 1953	0730	69	136
June 17, 1953	1030	72	7.74
July 28, 1953	1325	90	2.51
Aug. 27, 1953	1220	87	.53
Feb. 11, 1954	1445	45	6.38
Mar. 10, 1954	1555	51	7.54
May 10, 1955	1030	67	47.4
Feb. 14, 1961	1330	42	214
Mar. 22, 1961	0845	44	465
May 2, 1961	0850	52	210
June 6, 1961	1500	78	107
Aug. 15, 1961	1510	73	13.3
Sept. 19, 1961	1255	70	22.0
Nov. 27, 1961	1500	46	69.6
Feb. 13, 1962	0945	47	149
July 9, 1962	1200	84	13.4
Sept. 11, 1962	1435	76	10.4
Oct. 17, 1962	1530	67	8.90
Nov. 27, 1962	1320	46	6.32
Apr. 16, 1963	1345	64	33.0
May 21, 1963	1750	68	156
June 25, 1963	1530	76	14.7
Sept. 6, 1963	1100	76	8.20
Oct. 8, 1963	1630	69	.63
Dec. 19, 1963	1120	34	3.62
Feb. 25, 1964	1200	41	21.8
June 10, 1964	1700	75	66.3
July 21, 1964	1500	89	6.91
Aug. 25, 1964	0840	77	2.40
Oct. 6, 1964	1155	60	3.61
Nov. 24, 1964	1405	42	13.5
Dec. 16, 1964	1430	40	12.7
Jan. 4, 1965	1450	47	135
Feb. 1, 1965	1810	34	61.7
Apr. 6, 1965	1100	57	8,190
May 25, 1965	1030	78	9.75
June 23, 1965	1200	84	40.0
July 28, 1965	1300	80	101
Nov. 1, 1965	1515	55	22.2
Dec. 7, 1965	0930	40	10.9
Jan. 11, 1966	1215	44	99.2
Feb. 16, 1966	1230	34	182
Mar. 24, 1966	1030	46	68.0
May 2, 1966	1515	61	279
June 7, 1966	0920	73	24.7
July 14, 1966	0735	87	2.70
Aug. 23, 1966	0930	75	13.2
Sept. 28, 1966	1315	67	1.44
Nov. 1, 1966	1430	48	2.96
Dec. 14, 1966	1015	35	37.9
Jan. 24, 1967	0825	47	10.0
Feb. 28, 1967	1730	36	21.1
Apr. 4, 1967	1440	65	29.9
May 8, 1967	1235	60	550
July 18, 1967	1010	76	15.0
Aug. 30, 1967	1700	78	2.78
Oct. 6, 1967	1230	66	14.1
Nov. 6, 1967	1215	44	225
Nov. 27, 1967	1405	44	44.1
Jan. 8, 1968	1205	32	61.1
Feb. 29, 1968	1515	39	421
Apr. 5, 1968	1200	46	491
June 10, 1968	1655	88	53.6
Sept. 5, 1968	1115	76	3.24
Oct. 16, 1968	1020	66	137
Dec. 17, 1968	1500	36	47.9
Feb. 11, 1969	1515	42	317
Mar. 10, 1969	1430	37	237
May 7, 1969	0955	72	53.5
May 22, 1969	1010	64	860
July 23, 1969	1310	82	40.7
Aug. 6, 1969	1030	80	11.0

AUXVASSE CREEK BASIN

6-9272. Big Hollow near Fulton, Mo.

Location.—Lat 38°48'45", long 91°56'45", in NW¼NW¼ sec.33, T.47 N., R.9 W., at culvert on County Highway C, 2.0 miles south of Fulton and 3 miles upstream from mouth.

Drainage area.—4.05 sq mi.

Discharge records available.—March 1957 to September 1959 (discontinued). Discharge measurements and daily gage-height record available to September 1969.

Maximum temperature measured.—76° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 22, 1964	1340	69	0.98				
Dec. 16, 1964	0745	33	.03				
Jan. 15, 1965	1400	33	.34				
Feb. 18, 1965	0755	33	.39				
Mar. 12, 1965	1600	46	18.5				
Apr. 28, 1965	1620	53	.71				
Oct. 13, 1965	0830	50	.07				
Nov. 18, 1965	1705	43	.11				
May 25, 1966	0930	62	1.86				
June 29, 1966	0755	70	1.19				
Dec. 14, 1966	0940	34	.06				
Jan. 12, 1967	0850	33	.04				
Mar. 2, 1967	0900	40	.15				
July 19, 1967	1645	76	.13				
Feb. 28, 1968	1445	34	.12				
Apr 2, 1968	1650	50	.52				
Oct. 2, 1968	1735	74	.01				
Jan. 16, 1969	1415	33	35.0				
Feb. 25, 1969	1345	37	---				
Mar. 18, 1969	1330	53	1.02				
June 9, 1969	1725	70	.51				

GASCONADE RIVER BASIN

6-9280. Gasconade River near Hazlegreen, Mo.

Location.--Lat 37°45'35", long 92°27'05", in SE¼SE¼ sec.15, T.35, T.35 N., R.14 W., on downstream end of center pier of bridge on access road (formerly east-bound lane of U. S. Highway 66) 400 ft upstream from new east-bound land bridge on U. S. Highway 66, 1 mile downstream from Osage Fork, 1½ miles west of Hazlegreen and at mile 180.

Drainage area.--1,250 sq mi, approximately.

Discharge records available.--October 1928 to September 1969. Prior to April 1929 monthly discharge only, published in WSP 1310.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 4, 1945	1300	77	86.7
Oct. 16, 1945	1115	58	554
June 25, 1946	1020	75	299
July 23, 1946	0730	82	105
Oct. 15, 1946	1110	60	99.0
Jan. 28, 1947	1505	45	457
Mar. 4, 1947	1050	34	232
Aug. 3, 1947	1130	80	127
Sept. 8, 1947	1020	80	79.2
Oct. 22, 1947	1625	66	131
Dec. 2, 1947	1305	46	270
May 21, 1948	1530	74	522
Aug. 13, 1948	1305	77	195
Oct. 5, 1948	1715	61	76.1
Nov. 18, 1948	1400	65	209
Dec. 23, 1948	1445	41	304
May 2, 1949	1605	69	416
Nov. 28, 1949	1230	47	322
June 20, 1950	1650	69	788
July 31, 1950	1415	78	216
Sept. 11, 1950	1630	70	319
Jan. 3, 1951	1500	43	146
May 1, 1951	1140	69	896
July 31, 1951	1430	80	551
Dec. 26, 1951	1230	35	644
June 6, 1952	1400	69	256
July 22, 1952	1340	85	161
Sept. 3, 1952	1225	71	150
Oct. 15, 1952	1230	57	87.4
May 25, 1953	1120	72	449
July 11, 1953	1015	72	56.4
Aug. 19, 1953	1535	80	54.1
Sept. 17, 1953	0800	70	33.7
Oct. 2, 1953	0940	69	34.2
Nov. 21, 1953	0905	52	72.0
Jan. 9, 1954	0810	40	72.1
Apr. 6, 1954	0955	65	169
June 19, 1954	0615	80	77.8
July 30, 1954	1700	86	34.2
Aug. 27, 1954	0750	81	48.2
Nov. 19, 1954	1425	50	342
Dec. 17, 1954	1355	40	715
May 16, 1955	1055	67	377
Aug. 23, 1955	0820	78	54.3
Jan. 15, 1957	1300	34	146
Feb. 15, 1961	1330	46	1,060
Sept. 5, 1961	0920	78	128
Sept. 19, 1961	0700	63	178
Oct. 9, 1961	1230	66	96.5
Feb. 26, 1962	1500	45	1,450
July 9, 1962	1440	80	271
Aug. 13, 1962	1345	79	60.5
Dec. 15, 1962	0915	35	133
May 6, 1963	1345	71	269
May 27, 1963	1600	63	23,400
June 10, 1963	1100	80	434
Oct. 29, 1963	1010	57	54.1
Dec. 4, 1963	1035	41	78.0
Jan. 6, 1964	1205	36	76.4
Feb. 12, 1964	0955	38	92.4
Mar. 18, 1964	1525	54	485
Apr. 20, 1964	1120	66	433
May 27, 1964	1030	76	132
July 10, 1964	1515	74	119
Sept. 14, 1964	1015	68	46.9
Oct. 6, 1964	0915	56	61.4
Nov. 12, 1964	1340	59	69.7
Dec. 14, 1964	1315	41	87.4
Jan. 18, 1965	1030	35	202
May 24, 1965	1255	76	323
July 9, 1965	1935	77	1,600
Aug. 9, 1965	1215	82	289
Oct. 15, 1965	1140	60	261
Dec. 20, 1965	1235	42	280
Feb. 7, 1966	1405	34	343
Feb. 15, 1966	1330	44	2,550
Mar. 29, 1966	1130	52	596
June 22, 1966	1045	76	229
July 28, 1966	0915	83	159
Aug. 31, 1966	1105	76	104
Oct. 7, 1966	0920	60	228
Nov. 9, 1966	1010	56	142
Jan. 26, 1967	1155	45	287
Feb. 21, 1967	1040	41	357
Mar. 29, 1967	1255	67	650
May 15, 1967	1635	60	12,100
June 7, 1967	1130	67	413
July 20, 1967	1320	75	256
Aug. 22, 1967	1140	75	84.7
Oct. 11, 1967	1405	57	318
Dec. 4, 1967	1410	43	644
Mar. 29, 1968	1235	61	1,360
June 19, 1968	1225	79	262
July 30, 1968	1345	76	337
Aug. 30, 1968	1115	71	127
Oct. 21, 1968	1320	59	166
Dec. 13, 1968	1210	41	633
Apr. 30, 1969	1545	59	1,500
May 13, 1969	0905	60	596
June 9, 1969	1035	75	327
Aug. 25, 1969	1405	77	186

GASCONADE RIVER BASIN

6-9282. Laquey Branch near Hazlegreen, Mo.

Location.--Lat 37°46'25", long 92°21'52", in SW¼SE¼ sec.9, T.35 N., R.13 W., at culvert under U. S. Highway 66, and 3.0 miles east of Highway 133 at Highway 133 at Hazlegreen.

Drainage area.--1.58 sq mi.

Discharge records available.--Discharge measurements and gage-height record available from June 1958 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 15, 1961	1415	54	0.96				
Oct. 9, 1961	1135	74	.05				
Mar. 3, 1962	1225	45	1.44				
Apr. 19, 1962	1520	60	.66				
July 12, 1962	1400	82	.10				
Aug. 13, 1962	1030	76	.03				
Feb. 26, 1963	1120	34	.05				
Apr. 1, 1963	1345	58	2.30				
May 6, 1963	1200	70	1.13				
June 10, 1963	1000	82	.12				
Apr. 20, 1964	1040	66	.24				
Feb. 15, 1965	1045	40	.44				
Feb. 15, 1966	1630	41	1.64				
May 6, 1966	1500	76	.62				
Dec. 13, 1966	1550	41	.44				
Jan. 26, 1967	1500	40	4.25				
Feb. 21, 1967	1630	42	.17				
Mar. 29, 1967	1440	71	380				
Aug. 22, 1967	1220	75	.08				
Dec. 4, 1967	1510	46	2.74				
June 19, 1968	1340	77	.13				
Mar. 25, 1969	1545	43	3.42				
Apr. 30, 1969	1630	66	.52				
May 14, 1969	1730	72	.33				
Aug. 25, 1969	1520	80	.04				

GASCONADE RIVER BASIN

6-9284.5 Roubidoux Creek at Waynesville, Mo.

Location.--SW¼ sec.24, T.36 N., R.12 W., at bridge on City Route 66 at Waynesville, Pulaski County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--68° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 4, 1945	1120	66	16.1				
May 16, 1946	0930	68	170				
Jan. 28, 1947	1310	48	81.9				
Sept. 8, 1947	0900	65	20.6				
Sept. 15, 1952	0710	64	22.3				
Oct. 5, 1963	1445	66	5.57				
Nov. 6, 1963	1615	61	7.60				
May 28, 1969	1345	66	61.8				
Aug. 5, 1969	0735	65	21.3				
Sept. 24, 1969	1415	66	16.4				

GASCONADE RIVER BASIN

6-9285. Gasconade River near Waynesville, Mo.

Location.--Lat 37°52'20", long 92°13'40", in SE¼SE¼ sec.3, T.36 N., R.12 W., on downstream side of center pier of county highway bridge, 2¼ miles downstream from Roubidoux Creek, 4 miles north of Waynesville, and at mile 136.

Drainage area.--1,680 sq mi, approximately.

Discharge records available.--August 1914 to September 1969. Prior to June 1921 monthly discharge only, published in WSP 1310.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 4, 1945	0940	70	155
Oct. 16, 1945	0810	53	792
June 23, 1946	1240	73	539
Oct. 15, 1946	0845	61	171
Jan. 28, 1947	1040	43	668
Mar. 4, 1947	0815	39	357
Aug. 4, 1947	0750	78	211
Sept. 8, 1947	0630	74	161
Dec. 2, 1947	1045	47	395
Jan. 12, 1948	1420	43	1,130
Aug. 13, 1948	1150	75	322
Oct. 5, 1948	1510	61	138
Nov. 18, 1948	1200	64	337
Dec. 23, 1948	1115	42	437
May 2, 1949	1315	69	585
Nov. 28, 1949	1020	48	488
July 31, 1950	1125	74	383
Sept. 11, 1950	1340	69	478
Oct. 11, 1950	1125	62	309
Jan. 3, 1951	1215	46	217
Sept. 25, 1951	1550	66	945
Feb. 29, 1952	1045	45	928
July 22, 1952	1045	74	337
Sept. 13, 1952	1115	66	264
Oct. 15, 1952	1045	57	155
Dec. 10, 1952	1045	43	354
Jan. 21, 1953	1050	43	269
May 25, 1953	0905	70	733
July 13, 1953	1155	73	113
Aug. 19, 1953	1130	71	101
Sept. 18, 1953	1650	74	69.7
Oct. 2, 1953	0725	64	71.3
Jan. 9, 1954	0955	44	131
Apr. 6, 1954	0800	61	265
June 19, 1954	0735	75	161
July 30, 1954	0645	81	75.0
Aug. 27, 1954	0920	78	99.8
Sept. 28, 1954	1200	70	52.6
Nov. 20, 1954	0935	49	223
Dec. 18, 1954	1430	41	939
Jan. 17, 1955	0900	40	512
June 27, 1955	1020	70	299
Oct. 9, 1956	1000	58	55.9
Feb. 15, 1961	1505	44	1,180
Sept. 8, 1961	1315	75	196
Sept. 20, 1961	1130	66	233
Oct. 9, 1961	0935	65	165
Nov. 27, 1961	1140	51	310
July 9, 1962	1100	78	616
Aug. 13, 1962	0930	74	130
Jan. 21, 1963	0845	34	244
Feb. 26, 1963	1020	37	179
Apr. 1, 1963	1210	59	1,480
May 6, 1963	0925	69	507
May 27, 1963	1330	63	13,000
June 10, 1963	0915	75	686
Oct. 29, 1963	0815	57	94.4
Dec. 4, 1963	1150	46	134
Jan. 6, 1964	1005	40	120
Feb. 12, 1964	1105	43	143
May 18, 1964	1645	55	809
May 27, 1964	0855	71	224
July 10, 1964	1715	78	185
Aug. 14, 1964	1110	76	101
Sept. 18, 1964	1450	67	96.5
Oct. 6, 1964	0835	56	94.5
Dec. 14, 1964	0925	42	134
Jan. 22, 1965	1545	44	230
Feb. 22, 1965	1530	45	353
Apr. 21, 1965	1010	60	1,730
May 24, 1965	0925	70	506
July 5, 1965	1445	76	994
Aug. 9, 1965	1100	69	415
Oct. 15, 1965	1550	61	365
Nov. 29, 1965	0905	42	230
Feb. 7, 1966	1015	38	406
Mar. 29, 1966	1705	55	840
June 22, 1966	1335	72	374
July 28, 1966	1220	77	148
Aug. 31, 1966	0825	71	188
Oct. 7, 1966	1315	59	356
Nov. 9, 1966	1245	58	205
Dec. 16, 1966	0945	41	652
Jan. 27, 1967	0850	41	559
Feb. 23, 1967	1055	39	509
Mar. 31, 1967	1020	60	774
May 3, 1967	1355	58	3,130
June 8, 1967	1350	70	683
July 20, 1967	1645	76	355
Aug. 22, 1967	1420	72	164
Nov. 27, 1967	0920	48	509
Dec. 5, 1967	1045	46	1,080
Mar. 29, 1968	1615	59	1,860
July 15, 1968	1050	73	197
Oct. 22, 1968	0940	59	211
Dec. 16, 1968	1240	38	760
May 1, 1969	1035	58	1,810
July 9, 1969	1630	81	551
Aug. 26, 1969	0955	69	286

GASCONADE RIVER BASIN

6-9300. Big Piney River near Big Piney, Mo.

Location.--Lat 37°40'00", long 92°03'05", in NE¼SE¼ sec.8, T.34 N., R.10 W., on downstream side of left pier of Ross Highway bridge, 3 miles east of Big Piney, 14-3/4 miles upstream from Spring Creek, and at mile 22.

Drainage area.--560 sq mi, approximately.

Discharge records available.--October 1921 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 16, 1946	1425	60	892
July 8, 1946	0810	76	221
Oct. 22, 1946	1415	67	172
Dec. 2, 1946	0900	43	653
Dec. 16, 1946	0910	51	1,010
Feb. 6, 1947	0840	40	335
Mar. 10, 1947	1345	46	386
May 27, 1947	1045	65	542
Aug. 4, 1947	0955	78	171
Sept. 11, 1947	1345	78	153
Dec. 2, 1947	0840	45	217
Jan. 12, 1948	1050	44	592
Feb. 28, 1948	1040	46	707
Apr. 9, 1948	0815	55	627
May 21, 1948	0845	72	474
Aug. 13, 1948	0920	73	193
Aug. 22, 1948	1725	73	167
Aug. 29, 1948	1425	76	168
Oct. 5, 1948	0930	59	137
Dec. 23, 1948	0830	43	241
May 2, 1949	1140	68	427
July 25, 1949	0735	76	338
Sept. 2, 1949	1530	75	207
Oct. 10, 1949	0940	69	658
Nov. 28, 1949	0725	46	227
Jan. 3, 1950	1035	41	829
Apr. 3, 1950	1030	55	677
July 31, 1950	0940	74	237
Sept. 4, 1950	1030	67	262
Oct. 11, 1950	0830	77	192
Jan. 3, 1951	0940	44	180
Mar. 21, 1951	0940	46	671
May 1, 1951	0830	68	479
June 6, 1951	0915	66	326
July 31, 1951	0750	71	720
Dec. 26, 1951	0915	34	464
Feb. 29, 1952	0905	47	427
July 22, 1952	0850	78	251
Sept. 3, 1952	0900	65	163
Oct. 15, 1952	0830	56	148
Dec. 10, 1952	0900	45	242
Jan. 21, 1953	0900	42	190
May 25, 1953	0655	72	312
July 13, 1953	0935	73	126
Aug. 19, 1953	0835	71	117
Sept. 18, 1953	0730	69	106
May 8, 1954	1455	59	297
June 19, 1954	0920	77	137
Aug. 1, 1954	1430	80	88.9
Aug. 27, 1954	1140	82	84.2
Dec. 18, 1954	1110	40	330
Jan. 17, 1955	0715	41	214
May 16, 1955	0745	65	206
June 27, 1955	0845	72	179
June 14, 1956	0750	72	246
Oct. 9, 1956	0815	59	79.1
Feb. 23, 1961	0800	48	354
Sept. 8, 1961	1005	75	140
Sept. 20, 1961	0905	64	134
Oct. 9, 1961	0725	63	127
Nov. 27, 1961	0945	50	159
Dec. 22, 1961	1130	38	410
Feb. 26, 1962	1030	46	709
Aug. 3, 1962	0750	71	134
Oct. 7, 1962	1530	69	371
Dec. 10, 1962	0935	38	140
Mar. 29, 1963	1255	62	325
Apr. 29, 1963	0950	62	244
July 8, 1963	1110	73	277
Aug. 12, 1963	1350	78	158
Sept. 18, 1963	1600	75	110
Oct. 22, 1963	1235	66	106
Nov. 26, 1963	1110	47	155
Jan. 6, 1964	0845	38	116
Feb. 3, 1964	1000	43	111
Mar. 9, 1964	1135	49	297
Apr. 13, 1964	1500	58	650
May 18, 1964	1020	74	209
June 22, 1964	1615	78	151
Aug. 7, 1964	1020	80	90.8
Sept. 15, 1964	0955	72	95.8
Oct. 6, 1964	1115	56	89.2
Nov. 6, 1964	1300	59	100
Dec. 14, 1964	1035	42	102
Jan. 28, 1965	1515	41	116
Feb. 22, 1965	1720	45	150
Mar. 22, 1965	1200	44	143
Apr. 26, 1965	1150	61	696
May 14, 1965	1510	70	356
June 4, 1965	1415	75	---
Aug. 30, 1965	1015	71	273
Oct. 8, 1965	1350	65	246
Nov. 8, 1965	1345	63	142
Dec. 17, 1965	1320	45	211
Jan. 20, 1966	1045	36	284
Mar. 25, 1966	1100	51	375
May 6, 1966	1605	67	644
June 10, 1966	1320	68	316
Sept. 26, 1966	0910	62	132
Nov. 9, 1966	1350	50	139
Dec. 16, 1966	1420	44	269
Jan. 27, 1967	1200	44	1,390
Feb. 23, 1967	1520	43	224
Mar. 31, 1967	1425	65	332
May 3, 1967	1000	56	923
June 8, 1967	1100	67	223
July 21, 1967	1005	73	136
Aug. 21, 1967	1530	72	113
Dec. 5, 1967	1350	46	423
May 29, 1968	1120	64	497
July 15, 1968	1400	77	162
Sept. 5, 1968	1050	69	154
Oct. 22, 1968	1440	60	155
Dec. 16, 1968	1505	38	321
Feb. 3, 1969	1630	44	1,510
Aug. 26, 1969	1210	74	164

GASCONADE RIVER BASIN

6-9310. Beaver Creek near Rolla, Mo.

Location.--lat 37°52'40", long 91°47'40", in SE¼SW¼ sec.34, T.37 N., R.8 W., on left bank 30 ft downstream from bridge on U. S. Highway 63, 4½ miles upstream from mouth, and 5 miles south of Rolla.

Drainage area.--14.0 sq mi.

Discharge records available.--August 1948 to August 1958 (discontinued).

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 9, 1949	0830	63	5.64				
Aug. 15, 1949	1610	82	.79				
Nov. 21, 1949	1100	43	2.20				
Nov. 28, 1949	1020	46	2.47				
Jan. 23, 1950	1000	43	11.3				
May 16, 1950	0925	64	11.8				
May 22, 1950	1008	64	18.8				
July 17, 1950	1130	77	1.68				
Sept. 25, 1950	0950	60	1.29				
Dec. 18, 1950	1405	36	1.49				
Apr. 30, 1951	1420	75	7.08				
Aug. 11, 1952	0900	73	11.5				
Nov. 25, 1952	1145	46	21.6				
Mar. 2, 1953	1345	39	12.6				
Mar. 6, 1953	0845	48	60.5				
Apr. 24, 1953	1125	64	68.3				
Jan. 18, 1957	0950	71	.74				
June 22, 1957	1150	70	21.2				

GASCONADE RIVER BASIN

6-9287. Beeler Creek near Cabool, Mo.

Location.--Lat 37°06'12", long 92°04'17", in SE¼NE¼SE¼ sec.18, T.28 N., R.10 W., at bridge on U. S. Highway 60 and 63, 2.0 miles upstream from mouth, and 2.1 miles southeast of Cabool.

Drainage area.--7.78 sq mi.

Discharge records available.--Discharge measurements and gage-height record available November 1967 to September 1969.

Maximum temperature measured.--74° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 15, 1967	1350	45	21.2				
Mar. 20, 1968	1105	44	59.4				
May 29, 1968	1245	60	2.42				
June 3, 1968	1410	66	2.55				
July 11, 1968	1050	66	.91				
Aug. 28, 1968	1415	68	1.18				
Oct. 14, 1968	1025	62	1.24				
Nov. 25, 1968	1310	52	3.53				
Jan. 16, 1969	1105	46	4.16				
Mar. 20, 1969	1430	52	3.53				
Apr. 17, 1969	0915	54	12.7				
July 14, 1969	1700	74	.37				
Sept. 15, 1969	1645	68	.34				

GASCONADE RIVER BASIN

6-9290. Coyle Branch at Houston, Mo.

Location.—Lat 37°19'25", long 91°57'12", in NW¼NW¼ sec.8, T.30 N., R.9 W., on right bank at upstream end of double culvert under U. S. Highway 63, at east edge of Houston, a quarter of a mile upstream from mouth.

Drainage area.—1.10 sq mi.

Discharge records available.—June 1949 to June 1955 (discontinued).

Maximum temperature measured.—88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 19, 1949	0915	76	1.38				
July 26, 1949	1040	82	.43				
Sept. 2, 1949	1145	78	.20				
Oct. 17, 1949	1040	62	.75				
Nov. 15, 1949	1040	48	.10				
Dec. 4, 1949	0730	40	.28				
Dec. 23, 1949	1100	40	.87				
May 11, 1950	1110	57	25.4				
June 25, 1950	1625	88	.22				
July 7, 1950	1050	76	.06				
Dec. 30, 1950	1515	40	.01				
Feb. 7, 1951	1015	33	1.47				
Feb. 20, 1951	1210	49	8.97				
Feb. 28, 1951	1130	52	1.52				
Mar. 15, 1951	1715	44	1.21				
June 12, 1951	0755	67	.16				
Mar. 18, 1953	1010	53	1.66				
Mar. 25, 1953	0935	48	.69				
Apr. 29, 1953	0955	57	.41				
June 3, 1953	0825	65	.01				

GASCONADE RIVER BASIN

6-9315. Little Beaver Creek near Rolla, Mo.

Location.--Lat 37°56'06", long 91°50'11", in NW¼NW¼ sec.17, T.37 N., R.8 W., on right bank 1,700 ft downstream from Interstate Highway 44, and 3 miles west of Rolla.

Drainage area.--6.41 sq mi.

Discharge records available.--November 1947 to September 1969.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 2, 1947	1320	52	1.36				
Dec. 26, 1947	1325	44	.76				
Jan. 20, 1948	1550	35	1.20				
June 18, 1948	----	65	21.6				
Aug. 15, 1949	1145	82	.75				
Nov. 21, 1949	0950	46	1.30				
Feb. 9, 1950	1645	52	2.90				
Feb. 13, 1950	1040	45	31.2				
Sept. 25, 1950	1130	61	.82				
Dec. 18, 1950	1540	34	.66				
Dec. 26, 1950	1140	35	.67				
Jan. 2, 1951	1150	44	.82				
Apr. 24, 1951	1345	67	8.69				
May 1, 1951	0905	66	3.85				
Nov. 25, 1952	1310	45	24.4				
Mar. 2, 1953	1120	39	13.4				
Apr. 24, 1953	0945	59	64.6				
June 18, 1953	0850	71	.30				
Oct. 29, 1953	1305	55	.20				
July 14, 1961	1445	68	1.06				
Aug. 25, 1961	1525	76	.57				
Sept. 23, 1961	1255	70	.43				
Dec. 2, 1961	0920	44	1.20				
June 13, 1962	1210	70	2.18				
Feb. 14, 1963	1500	33	.36				
Nov. 13, 1964	0815	47	.11				
Mar. 9, 1965	1345	48	9.40				
Mar. 30, 1965	1130	47	2.00				
Sept. 7, 1965	1600	78	4.95				
Sept. 14, 1965	1000	73	25.5				
Jan. 15, 1966	1400	41	1.80				
Feb. 7, 1966	1700	33	58.7				
Aug. 16, 1966	0945	74	36.8				
Sept. 10, 1966	0920	64	.32				
Feb. 24, 1967	1525	38	1.20				
June 21, 1967	1815	71	168				
June 22, 1967	1030	69	9.74				
Dec. 7, 1967	1430	49	10.4				
Feb. 15, 1968	1500	39	3.68				
May 24, 1968	1320	59	15.1				
July 15, 1968	1600	82	.26				
Aug. 30, 1968	1135	66	.10				
Oct. 18, 1968	1450	61	.48				
Dec. 18, 1968	1510	42	2.15				
Mar. 24, 1969	1515	44	34.1				
Apr. 3, 1969	1410	54	4.34				
May 1, 1969	1505	68	2.67				
June 30, 1969	1625	89	.66				
Aug. 26, 1969	1550	75	.68				

GASCONADE RIVER BASIN

6-9320. Little Piney Creek at Newburg, Mo.

Location.--Lat 37°54'35", long 91°54'12", in SE¼ sec.22, T.37 N., R.9 W., on left bank at downstream side of bridge on County Highway P and T at Newburg, 2 miles upstream from Mill Creek.

Drainage area.--200 sq mi, approximately.

Discharge records available.--October 1928 to September 1969.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 1, 1945	0840	62	708
Aug. 1, 1946	0750	74	72.7
Oct. 10, 1946	1330	75	62.6
Nov. 29, 1946	1345	45	202
Jan. 31, 1947	0825	40	106
Apr. 1, 1947	0845	56	208
May 29, 1947	0845	64	117
Aug. 1, 1947	0830	77	77.3
Aug. 29, 1947	1025	77	59.7
Sept. 30, 1947	1545	62	56.6
Dec. 31, 1947	1220	40	72.7
Jan. 30, 1948	0950	39	78.0
Feb. 29, 1948	1430	49	151
Aug. 31, 1948	1430	74	65.0
Sept. 30, 1948	0930	61	59.4
Oct. 29, 1948	1715	54	54.8
Nov. 30, 1948	1020	42	57.5
Dec. 31, 1948	1130	36	66.0
May 2, 1949	1015	61	107
May 31, 1949	0800	69	85.7
July 1, 1949	0745	71	113
Aug. 1, 1949	0700	70	79.9
Sept. 1, 1949	0810	65	65.7
Oct. 31, 1949	1135	58	207
Nov. 30, 1949	1325	48	87.4
Dec. 30, 1949	1145	46	230
Jan. 31, 1950	0900	39	215
Feb. 28, 1950	1030	59	400
Mar. 31, 1950	1005	51	199
Apr. 30, 1950	1415	55	203
June 10, 1950	1355	75	5,980
Aug. 31, 1950	0830	68	172
Oct. 31, 1950	0920	67	81.8
Dec. 1, 1950	1625	50	76.7
Jan. 2, 1951	0810	50	73.3
Jan. 31, 1951	1010	34	73.4
Feb. 28, 1951	1030	52	231
Apr. 2, 1951	0830	48	139
Apr. 30, 1951	1400	70	156
May 31, 1951	1015	67	149
Jan. 2, 1952	0930	41	148
Apr. 30, 1952	1250	64	154
July 31, 1952	0820	75	78.5
Sept. 2, 1952	0730	62	78.5
Sept. 30, 1952	0730	65	66.9
Oct. 30, 1952	0925	59	66.8
Dec. 1, 1952	0750	41	68.6
Jan. 30, 1953	1155	46	88.6
Mar. 31, 1953	1200	63	110
May 1, 1953	0745	61	158
June 1, 1953	0830	72	82.5
July 1, 1953	0805	78	60.8
July 31, 1953	0630	78	52.8
Sept. 1, 1953	0800	74	48.3
Sept. 18, 1953	1455	74	44.9
Oct. 30, 1953	0905	54	46.9
Nov. 30, 1953	0815	47	45.9
Dec. 30, 1953	1045	46	45.7
Jan. 29, 1954	0830	34	47.1
Mar. 1, 1954	1115	47	44.0
Apr. 30, 1954	0740	70	42.7
June 30, 1954	0715	76	37.6
Aug. 31, 1954	0920	75	33.6
Sept. 30, 1954	0815	74	36.3
May 2, 1955	0815	67	60.5
Mar. 1, 1956	0805	46	52.1
Oct. 1, 1956	0900	64	27.1
Oct. 31, 1960	0900	53	46.6
Nov. 30, 1960	0900	42	41.4
Feb. 28, 1961	1115	45	72.9
Mar. 30, 1961	1125	51	105
May 1, 1961	1615	56	275
June 29, 1961	1115	71	86.1
July 31, 1961	1410	76	102
Sept. 5, 1961	0900	71	79.6
Sept. 28, 1961	1430	65	60.4
Oct. 31, 1961	1015	62	62.1
Nov. 30, 1961	1300	44	68.4
Jan. 2, 1962	1405	42	83.2
Mar. 30, 1962	1320	51	281
June 28, 1962	1320	75	66.7
Aug. 31, 1962	1045	81	48.6
Sept. 28, 1962	1000	59	52.6
Oct. 29, 1962	1130	57	54.0
Nov. 29, 1962	0845	48	45.5
Dec. 28, 1962	0855	37	47.6
Mar. 28, 1963	1320	55	72.8
Apr. 2, 1963	1615	63	204
May 20, 1963	1330	64	102
May 28, 1963	0900	60	576
July 1, 1963	1100	76	72.3
July 30, 1963	1415	75	52.9
Sept. 28, 1963	1330	69	37.4
Nov. 29, 1963	0950	41	40.8
Dec. 30, 1963	1010	33	36.7
Jan. 29, 1964	1505	42	40.8
Feb. 28, 1964	1115	42	44.5
Mar. 30, 1964	0930	39	92.1
June 30, 1964	0840	72	53.0
July 29, 1964	1120	80	40.7
Aug. 28, 1964	0640	69	40.2
Sept. 28, 1964	1150	64	34.9
Nov. 12, 1964	0930	59	33.9
Nov. 30, 1964	1515	40	39.7
Dec. 29, 1964	1310	48	35.6
Jan. 28, 1965	1325	42	42.8
Mar. 1, 1965	1125	37	45.3
Mar. 30, 1965	0825	44	45.0
Apr. 30, 1965	1110	62	78.5
May 28, 1965	1245	69	65.2
June 29, 1965	1410	83	35.2
Aug. 2, 1965	1115	73	36.2
Aug. 31, 1965	1700	69	143
Nov. 30, 1965	0930	40	378
Dec. 29, 1965	1355	49	58.9
Jan. 28, 1966	1045	37	51.9
Apr. 29, 1966	1350	58	459
May 28, 1966	1250	61	138
June 29, 1966	1045	77	60.2
Aug. 1, 1966	1342	79	50.6
Sept. 1, 1966	1345	76	42.6
Sept. 29, 1966	1435	65	57.0
Oct. 28, 1966	0900	51	43.7
Dec. 28, 1966	1120	39	63.8
Jan. 30, 1967	1350	47	111
Feb. 27, 1967	1350	41	66.7
Mar. 30, 1967	1525	67	87.2
Apr. 28, 1967	1225	59	207
June 7, 1967	1600	69	149
July 21, 1967	1340	74	55.1
Aug. 24, 1967	0905	67	43.2
Nov. 29, 1967	1325	43	----
Dec. 7, 1967	0955	47	128
Feb. 21, 1968	1400	42	105

GASCONADE RIVER BASIN

Temperature and Discharge of Little Piney Creek at Newburg, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Mar. 25, 1968	1640	56	193				
May 24, 1968	1055	57	424				
July 29, 1968	1425	73	58.5				
Aug. 23, 1968	0915	75	52.5				
Sept. 10, 1968	1000	61	50.2				
Sept. 23, 1968	1420	68	50.6				
Oct. 24, 1968	1215	53	44.2				
Nov. 25, 1968	1110	47	76.7				
Dec. 23, 1968	1445	32	76.7				
Feb. 24, 1969	1325	45	363				
Mar. 26, 1969	1045	44	323				
May 27, 1969	1420	69	80.8				
June 23, 1969	1400	73	79.1				
July 24, 1969	1010	71	64.3				
Aug. 28, 1969	0900	68	52.5				

GASCONADE RIVER BASIN

6-9335. Gasconade River at Jerome, Mo.

Location.--Lat 37°55'35", long 91°58'40", in SE¼ sec.13, T.37 N., R.10 W., on left bank at Jerome, 0.5 mile downstream from Little Piney Creek. River mile 107.

Drainage area.--2,840 sq mi, approximately.

Discharge records available.--April 1903 to July 1906 (published as "at Arlington") and January 1923 to September 1969. October to December 1922 monthly discharge only, published in WSP 1310. Gage-height records collected intermittently in the vicinity 1885-1926 and at same site since 1938 are contained in reports of U. S. Weather Bureau.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 30, 1948	1205	36	940
Apr. 30, 1948	1310	63	1,200
Aug. 31, 1948	1040	77	762
Sept. 30, 1948	1235	63	524
Oct. 29, 1948	1325	56	562
Nov. 30, 1948	1315	46	670
May 2, 1949	1450	68	1,500
Aug. 1, 1949	0925	72	1,310
Sept. 1, 1949	1110	67	1,270
Mar. 31, 1950	1305	51	3,000
Oct. 31, 1950	0920	66	743
Dec. 1, 1950	1410	45	729
Jan. 2, 1951	1045	44	660
Sept. 2, 1952	0915	68	824
Sept. 30, 1952	0940	69	574
Oct. 30, 1952	1105	58	584
Dec. 1, 1952	1030	40	1,010
Dec. 31, 1952	0850	39	810
Feb. 6, 1953	1330	47	1,040
Feb. 27, 1953	1130	48	797
Feb. 28, 1953	0955	47	875
Feb. 28, 1953	1055	47	851
June 1, 1953	1135	80	989
July 1, 1953	1145	82	495
July 31, 1953	0925	87	446
Sept. 1, 1953	1055	79	393
Sept. 30, 1953	1200	68	372
Oct. 30, 1953	1125	53	424
Nov. 30, 1953	1150	50	458
Dec. 30, 1953	0750	46	453
Mar. 1, 1954	1300	50	573
Apr. 30, 1954	1055	73	593
June 30, 1954	1005	79	374
July 19, 1954	1305	84	330
Aug. 31, 1954	1445	77	323
Sept. 28, 1954	0910	69	281
Sept. 30, 1954	1130	70	320
Nov. 30, 1954	0750	43	561
Aug. 31, 1956	0735	75	356
Oct. 1, 1956	1110	66	278
Oct. 31, 1960	1200	52	522
Nov. 30, 1960	1030	43	631
May 1, 1961	1430	55	6,730
June 29, 1961	0955	76	933
Sept. 5, 1961	1050	76	693
Sept. 20, 1961	1345	67	630
Sept. 28, 1961	1030	67	592
Oct. 31, 1961	1300	63	571
Nov. 30, 1961	0955	44	715
Jan. 2, 1962	1110	40	1,060
June 28, 1962	1130	76	856
Aug. 31, 1962	0855	80	402
Sept. 28, 1962	0810	60	683
Oct. 29, 1962	1325	57	900
Nov. 29, 1962	1245	49	626
Dec. 28, 1962	1140	38	724
May 28, 1963	1400	63	28,500
July 30, 1963	0930	76	660
Oct. 31, 1963	1500	58	364
Dec. 29, 1963	1125	43	483
Dec. 30, 1963	0900	33	399
Jan. 29, 1964	1100	39	422
Feb. 28, 1964	0845	43	477
Mar. 30, 1964	1240	49	1,280
May 22, 1964	1600	75	761
July 29, 1964	0855	82	395
Aug. 28, 1964	1020	72	461
Sept. 28, 1964	1020	63	376
Oct. 30, 1964	0915	56	401
Nov. 30, 1964	1350	42	453
Dec. 29, 1964	0845	44	401
Jan. 29, 1965	1015	36	614
Mar. 1, 1965	0950	33	885
Mar. 30, 1965	1425	50	706
Apr. 29, 1965	1335	65	1,830
May 28, 1965	1125	69	7,980
June 29, 1965	1205	76	2,330
Aug. 2, 1965	1030	76	786
Aug. 31, 1965	1535	73	2,490
Dec. 29, 1965	1230	43	1,790
Jan. 28, 1966	0845	37	938
Mar. 30, 1966	0830	49	1,580
Apr. 29, 1966	1010	59	8,900
May 28, 1966	1050	63	2,380
June 29, 1966	0715	76	741
Aug. 1, 1966	1000	78	612
Sept. 1, 1966	0710	73	545
Oct. 23, 1966	1130	55	678
Dec. 28, 1966	0915	38	843
Feb. 27, 1967	1115	40	920
Apr. 28, 1967	1050	59	4,580
July 21, 1967	1315	75	816
Sept. 28, 1967	1025	60	861
Nov. 29, 1967	1400	44	---
Feb. 21, 1968	1200	39	1,780
Mar. 25, 1968	1705	49	5,630
July 29, 1968	1140	77	870
Aug. 23, 1968	1015	78	892
Sept. 23, 1968	1135	70	803
Oct. 24, 1968	0950	56	574
Nov. 25, 1968	1425	48	1,900
Dec. 23, 1968	1120	31	---
Feb. 24, 1969	1130	43	5,950
May 27, 1969	0915	68	1,160
May 28, 1969	1455	76	1,150
Aug. 5, 1969	1405	80	668
Aug. 28, 1969	1125	77	653
Sept. 24, 1969	1340	68	562
Sept. 25, 1969	1410	68	549

MISSOURI RIVER MAIN STEM

Temperature and Discharge of Missouri River at Hermann, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
June 6, 1962	1300	73	116,000
June 15, 1962	1310	74	126,000
July 6, 1962	1300	82	71,700
July 16, 1962	1315	82	71,000
July 20, 1962	1300	81	71,400
Aug. 3, 1962	1255	80	61,800
Aug. 28, 1962	1315	80	57,500
Sept. 24, 1962	1415	68	43,800
Sept. 28, 1962	1330	67	82,600
Oct. 8, 1962	1250	67	56,400
Oct. 22, 1962	1330	65	48,100
Nov. 5, 1962	1455	49	44,500
Nov. 9, 1962	1410	47	43,400
Nov. 14, 1962	1100	47	41,400
Nov. 23, 1962	1400	46	44,900
Dec. 17, 1962	1410	34	17,300
Oct. 14, 1963	1125	69	36,900
Nov. 29, 1963	1430	46	40,300
Nov. 27, 1964	1400	42	41,900
Mar. 12, 1965	1115	39	93,600
Mar. 18, 1965	1745	41	178,000
Mar. 20, 1965	0945	37	220,000
Mar. 22, 1965	1030	35	148,000
Mar. 30, 1965	1315	40	59,000
Apr. 9, 1965	1350	51	254,000
Apr. 23, 1965	0830	61	73,400
Apr. 29, 1965	0720	56	87,700
May 6, 1965	1125	69	52,500
May 12, 1965	0950	69	66,200
May 27, 1965	1140	72	79,100
June 4, 1965	1200	71	123,000
June 8, 1965	1300	72	156,000
June 14, 1965	1130	74	112,000
June 28, 1965	1330	79	74,400
July 3, 1965	1640	75	245,000
July 9, 1965	1115	78	106,000
July 14, 1965	1120	81	112,000
July 19, 1965	1430	80	78,500
July 23, 1965	1100	76	238,000
July 27, 1965	1445	79	121,000
July 29, 1965	1245	80	93,400
Aug. 3, 1965	1145	79	63,400
Aug. 23, 1965	1240	79	46,100
Sept. 15, 1965	1415	73	98,300
Sept. 20, 1965	1115	72	99,100
Sept. 24, 1965	1145	66	300,000
Oct. 13, 1965	1710	61	74,500
Nov. 12, 1965	1405	55	58,100
Nov. 18, 1965	1045	48	59,200
Dec. 2, 1965	1425	42	52,600
Dec. 9, 1965	1425	40	36,400
Dec. 27, 1965	1345	40	66,500
Jan. 12, 1966	1520	38	47,600
Jan. 20, 1966	1450	33	45,600
Mar. 2, 1966	1040	81	74,800
Mar. 16, 1966	1355	49	70,000
Mar. 30, 1966	1400	47	53,500
Apr. 18, 1966	1400	52	56,200
Apr. 26, 1966	1350	61	118,000
May 2, 1966	1240	58	65,700
May 9, 1966	1410	64	45,900
May 18, 1966	1410	64	122,000
May 25, 1966	1800	69	82,700
May 31, 1966	1000	77	45,600
June 15, 1966	1525	70	186,000
June 20, 1966	1405	75	67,200
June 23, 1966	1335	78	48,500
June 29, 1966	1715	81	67,900
July 11, 1966	1200	83	57,600
July 27, 1966	1630	82	46,600
Aug. 8, 1966	1410	82	42,700
Aug. 15, 1966	1250	79	43,800
Aug. 18, 1966	1310	79	70,700
Aug. 25, 1966	1200	76	61,000
Aug. 29, 1966	1240	76	47,000
Sept. 12, 1966	1235	74	43,500
Sept. 15, 1966	1410	73	42,600
Sept. 21, 1966	1100	67	44,800
Sept. 28, 1966	1040	65	40,500
Oct. 4, 1966	1400	63	42,400
Oct. 6 1966	1310	61	40,700
Oct. 19, 1966	1325	61	45,500
Oct. 27, 1966	1330	55	40,700
Nov. 2, 1966	1430	48	40,000
Nov. 9, 1966	1410	54	40,700
Nov. 16, 1966	1435	45	43,600
Nov. 22, 1966	1400	48	42,500
Dec. 14, 1966	1630	36	27,500
Dec. 20, 1966	1430	39	24,000
Dec. 27, 1966	1115	33	25,300
Jan. 4, 1967	1425	33	16,500
Jan. 17, 1967	1540	33	14,500
Jan. 31, 1967	1455	37	29,000
Feb. 23, 1967	1510	34	24,100
Mar. 16, 1967	1400	48	23,600
Apr. 6, 1967	1800	60	106,000
Apr. 11, 1967	1530	64	68,300
Apr. 14, 1967	1645	61	70,200
Apr. 19, 1967	1545	62	112,000
May 3, 1967	1535	58	57,300
May 9, 1967	1655	58	94,200
May 18, 1967	1520	61	95,200
May 23, 1967	1630	67	47,200
June 7, 1967	1340	68	86,600
June 14, 1967	0815	72	230,000
June 16, 1967	1615	73	246,000
June 17, 1967	1345	76	253,000
July 5, 1967	1615	73	198,000
July 19, 1967	1210	78	71,500
July 26, 1967	1005	83	57,300
Aug. 2, 1967	1410	83	75,000
Aug. 9, 1967	1405	80	62,200
Aug. 16, 1967	1355	77	53,600
Aug. 29, 1967	1255	74	45,300
Sept. 7, 1967	1520	73	43,700
Sept. 13, 1967	1415	71	50,900
Sept. 20, 1967	1340	72	47,800
Sept. 27, 1967	1350	68	67,600
Oct. 5, 1967	1200	70	47,700
Oct. 18, 1967	1410	56	120,000
Oct. 26, 1967	1440	54	52,000
Nov. 7, 1967	1310	44	120,000
Dec. 6, 1967	1320	43	68,100
Dec. 20, 1967	1405	44	60,500
Jan. 16, 1968	1345	33	19,500
Feb. 29, 1968	1210	35	41,400
Apr. 2, 1968	1315	53	60,000
Apr. 4, 1968	1700	50	89,000
Apr. 9, 1968	1420	55	61,900
Apr. 11, 1968	1605	57	59,000
May 2, 1968	1000	65	64,800
May 14, 1968	1310	66	50,000
June 7, 1968	1350	73	80,300
June 17, 1968	1435	77	67,600
July 11, 1968	1000	78	49,300
July 18, 1968	1200	81	47,600
July 23, 1968	1435	82	54,900
Aug. 1, 1968	1325	76	71,200
Aug. 6, 1968	1320	80	119,000
Aug. 13, 1968	0850	78	141,000
Aug. 21, 1968	1430	81	76,500
Sept. 10, 1968	1400	70	47,600
Sept. 19, 1968	1300	69	47,300
Sept. 24, 1968	1345	65	58,800
Oct. 2, 1968	1520	74	48,500
Oct. 25, 1968	1315	49	64,600
Nov. 5, 1968	1125	54	56,100
Nov. 13, 1968	1250	44	63,900
Dec. 3, 1968	1230	44	99,500
Dec. 10, 1968	1210	39	56,800
Jan. 15, 1969	1400	36	44,100
Feb. 6, 1969	0950	36	79,300
Feb. 18, 1969	1345	39	57,400
Feb. 26, 1969	1210	33	74,200
Mar. 4, 1969	1145	40	94,200
Mar. 11, 1969	1330	34	87,400
Mar. 19, 1969	1205	50	63,700
Apr. 9, 1969	1320	45	195,000

MISSOURI RIVER MAIN STEM

Temperature and Discharge of Missouri River at Hermann, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 15, 1969	1300	57	147,000				
Apr. 21, 1969	1530	60	235,000				
Apr. 28, 1969	1530	59	167,000				
May 6, 1969	1420	64	113,000				
May 8, 1969	1325	60	108,000				
May 13, 1969	1200	61	127,000				
June 2, 1969	1430	64	163,000				
June 5, 1969	1230	72	126,000				
June 19, 1969	1415	76	89,900				
June 23, 1969	1220	72	197,000				
July 3, 1969	1400	85	313,000				
July 9, 1969	1300	80	258,000				
July 16, 1969	1315	85	182,000				
July 22, 1969	1515	85	149,000				
July 25, 1969	1230	86	99,400				
Aug. 6, 1969	1230	82	78,900				
Aug. 12, 1969	1230	82	72,500				
Aug. 19, 1969	1215	81	90,100				
Aug. 22, 1969	1125	80	73,700				
Aug. 27, 1969	1205	80	75,100				
Sept. 5, 1969	1240	80	74,500				
Sept. 9, 1969	1400	75	110,000				
Sept. 15, 1969	1220	72	77,700				
Sept. 22, 1969	1350	72	90,200				
Sept. 26, 1969	1330	72	108,000				

GASCONADE RIVER BASIN

6-9340. Gasconade River near Rich Fountain, Mo.

Location.--Lat 38°23'20", long 91°49'15", in SE¼ sec.16, T.42 N., R.8 W., on downstream side of center pier of bridge on State Highway 89, 800 ft upstream from Swan Creek and 4 miles east of Rich Fountain.

Drainage area.--3,180 sq mi, approximately.

Discharge records available.--October 1921 to September 1959 (discontinued).

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 15, 1946	1725	81	786				
Sept. 28, 1946	1200	69	798				
Aug. 27, 1947	1705	85	626				
Oct. 30, 1950	1150	70	800				
June 17, 1953	0740	71	704				
July 28, 1953	0710	82	560				
Aug. 27, 1953	0855	84	417				
Oct. 29, 1953	1145	54	464				
Feb. 12, 1954	1400	43	496				
Mar. 10, 1954	1320	51	538				
Apr. 17, 1956	0755	54	566				
Sept. 10, 1956	1250	71	327				
Oct. 6, 1964	1435	61	378				
Apr. 6, 1965	1810	56	15,900				
Aug. 15, 1966	1530	83	625				
Sept. 5, 1968	1400	76	673				
May 22, 1969	0825	68	2,030				
Aug. 6, 1969	0815	78	702				
Sept. 23, 1969	1510	72	755				

MISSOURI RIVER MAIN STEM

6-9345. Missouri River at Hermann, Mo.

Location.--Lat 38°42'36", long 91°26'21", in SW¼ sec.25, T.46 N., R.5 W., on downstream side of third pier from right abutment of bridge on State Highway 19 at Hermann. River mile 97.9.

Drainage area.--528,200 sq mi, approximately.

Discharge records available.--October 1897 to September 1969. Prior to August 1928 monthly discharge only published in WSP 1310. Gage-height records 1873-99 collected at site 480 ft downstream are contained in reports of Missouri River Commission; since 1900 in reports of U. S. Weather Bureau.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 27, 1949	1010	60	73,200	June 2, 1955	0800	68	74,000
May 7, 1949	1055	69	74,200	June 13, 1955	1050	65	55,200
May 12, 1949	1025	66	72,000	July 11, 1955	1000	84	54,200
May 18, 1949	1110	70	65,800	July 16, 1955	0615	81	55,200
May 23, 1949	1000	69	120,000	July 25, 1955	0650	85	39,600
May 27, 1949	1040	67	135,000	July 29, 1955	0700	88	41,900
June 9, 1949	0815	70	186,000	Aug. 3, 1955	0750	87	35,700
June 27, 1949	1335	80	172,000	Aug. 17, 1955	0700	79	35,700
July 2, 1949	1100	81	202,000	Sept. 14, 1955	0810	72	33,800
July 7, 1949	1330	84	95,100	Oct. 17, 1955	1140	58	42,900
July 22, 1949	1430	83	67,700	Dec. 29, 1955	1000	37	15,800
Aug. 1, 1949	1335	81	55,900	Mar. 8, 1956	0930	42	24,800
Aug. 5, 1949	1300	80	51,600	Mar. 14, 1956	0935	40	26,300
Sept. 21, 1949	1115	69	81,100	Mar. 21, 1956	0930	39	23,500
Sept. 26, 1949	1345	66	46,800	Apr. 13, 1956	0920	49	40,400
Oct. 11, 1949	1310	68	42,200	July 21, 1956	1000	80	47,000
Oct. 27, 1949	1140	56	110,000	Oct. 1, 1956	0845	68	33,800
Nov. 1, 1949	1245	51	53,300	Oct. 5, 1956	1120	57	33,900
Nov. 29, 1949	1305	44	31,800	Oct. 10, 1956	1130	64	33,800
May 12, 1953	1015	61	116,000	Oct. 15, 1956	0900	63	34,500
May 18, 1953	1000	61	99,600	June 12, 1957	1115	75	102,000
May 22, 1953	1020	68	80,500	June 17, 1957	1115	78	81,900
May 28, 1953	1020	72	60,100	July 14, 1957	0930	83	53,600
June 9, 1953	1015	79	50,000	Oct. 4, 1957	1130	65	36,000
June 3, 1953	0900	75	56,800	Oct. 23, 1957	0740	59	41,600
June 20, 1953	1045	82	97,300	Oct. 28, 1957	0650	50	77,900
June 25, 1953	0915	80	115,000	Nov. 6, 1957	0640	49	47,100
July 1, 1953	1015	79	124,000	Nov. 27, 1957	1100	39	28,100
July 7, 1953	1100	80	91,000	Dec. 4, 1957	1110	38	26,500
July 13, 1953	1100	78	55,600	May 19, 1958	1000	71	55,300
July 17, 1953	0900	77	53,900	June 4, 1958	1140	75	60,300
July 23, 1953	1000	81	53,700	June 9, 1958	1000	79	43,800
July 29, 1953	1015	84	48,900	June 14, 1958	0900	75	113,000
Aug. 4, 1953	0915	82	43,100	July 2, 1958	0830	76	58,500
Aug. 10, 1953	0915	79	45,900	July 9, 1958	1000	78	86,300
Aug. 20, 1953	0945	75	42,500	Aug. 16, 1958	1100	82	78,700
Aug. 26, 1953	1100	77	41,300	Aug. 20, 1958	0630	81	78,600
Sept. 1, 1953	0800	82	39,100	Aug. 29, 1958	1045	79	53,600
Sept. 12, 1953	1100	73	41,200	Sept. 5, 1958	0645	77	56,900
Sept. 29, 1953	1100	72	39,200	Sept. 10, 1958	1100	75	1[illegible]6,000
Oct. 5, 1953	1100	56	38,600	Sept. 15, 1958	1030	75	7[illegible],100
Oct. 9, 1953	1100	65	37,600	Sept. 20, 1958	1030	70	97,500
Oct. 20, 1953	1115	66	37,000	Sept. 27, 1958	1130	57	42,300
Oct. 24, 1953	0715	61	38,700	Oct. 31, 1958	1045	55	42,500
Oct. 29, 1953	1115	57	41,500	Nov. 7, 1958	1200	53	39,200
Nov. 4, 1953	1110	55	38,800	Nov. 14, 1958	1130	58	26,700
Nov. 10, 1953	1130	48	36,100	Feb. 11, 1959	1120	38	110,000
Nov. 16, 1953	1100	53	32,100	Apr. 22, 1959	0950	55	74,500
Nov. 20, 1953	1130	55	29,200	June 1, 1959	0700	71	108,000
Dec. 5, 1953	1015	47	22,700	June 19, 1959	1145	78	46,300
Dec. 15, 1953	0930	37	29,400	June 25, 1959	1200	84	44,700
Jan. 2, 1954	1100	40	16,200	July 2, 1959	1115	80	49,400
Jan. 7, 1954	1100	37	16,700	Sept. 9, 1959	1130	79	39,900
Mar. 31, 1954	1000	45	48,700	Sept. 21, 1959	1200	69	36,100
May 7, 1954	0945	56	86,500	Sept. 26, 1959	0930	69	76,800
May 13, 1954	1030	59	50,400	Oct. 1, 1959	1100	64	94,000
May 17, 1954	1100	65	40,500	Oct. 15, 1959	1130	59	99,000
May 20, 1954	1030	64	41,900	Oct. 19, 1959	1300	59	71,100
June 21, 1954	1030	78	101,000	Oct. 23, 1959	1230	59	55,000
July 10, 1954	1000	82	40,900	Nov. 13, 1959	1130	48	38,800
Jan. 5, 1955	1030	47	36,800	Nov. 20, 1959	1100	36	28,000
Jan. 12, 1955	1030	38	42,600	Nov. 25, 1959	1130	38	21,200
Jan. 21, 1955	1145	37	26,200	Dec. 4, 1959	1200	38	26,500
Mar. 2, 1955	1000	43	85,300	Dec. 16, 1959	1100	39	26,800
Apr. 15, 1955	1045	59	50,200	Oct. 6, 1961	1200	67	90,100
May 18, 1955	1145	69	58,200	Nov. 17, 1961	1415	48	137,000
May 23, 1955	0915	74	40,700	Nov. 29, 1961	0900	44	81,300
May 27, 1955	1115	74	41,400	Feb. 7, 1962	1500	35	165,000
				May 14, 1962	1130	71	51,100

LOUTRE RIVER BASIN

6-9355. Loutre River at Mineola, Mo.

Location.--Lat 38°53'20", long 91°34'30", in SE¼NW¼ sec.34, T.48 N., R.6 W., at downstream side of left pier of bridge in Mineola, 0.2 mile upstream from Sallee Branch, 1½ miles downstream from Interstate Highway 70, and at mile 28.

Drainage area.--202 sq mi.

Discharge records available.--December 1947 to September 1967 (discontinued).

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 3, 1947	0820	44	2.53				
Jan. 9, 1948	1305	35	242				
Feb. 10, 1948	1530	33	4.03				
Mar. 2, 1948	1520	64	1,120				
May 24, 1950	0845	72	25.7				
Oct. 3, 1950	1600	66	.45				
Oct. 18, 1950	1540	65	.56				
Nov. 14, 1950	1600	45	.64				
June 21, 1951	1615	72	78.6				
Aug. 24, 1951	1520	78	11.8				
Aug. 30, 1951	0945	81	11.3				
Nov. 17, 1952	1435	52	.11				
Mar. 24, 1954	1015	47	.33				
Nov. 17, 1960	1100	51	1.80				
July 18, 1961	0935	75	18.5				
Aug. 28, 1961	1025	73	1.16				
Oct. 6, 1961	1300	66	3.50				
Aug. 8, 1962	1440	79	.59				
Nov. 14, 1962	1220	51	.18				
Mar. 27, 1963	1045	55	9.28				
May 17, 1963	1230	64	346				
June 26, 1963	1300	83	.47				
July 30, 1963	1330	89	.05				
Aug. 30, 1963	1050	79	.21				
Oct. 8, 1963	1415	71	.08				
Nov. 26, 1963	1600	46	.13				
Feb. 27, 1964	0945	40	.32				
Mar. 26, 1964	1350	37	139				
May 4, 1964	1350	74	16.4				
June 10, 1964	0900	74	19.0				
July 7, 1964	1315	84	5.94				
Aug. 14, 1964	0715	68	.04				
Jan. 5, 1965	1500	45	7.14				
Mar. 12, 1965	1425	39	229				
Mar. 22, 1965	1615	44	53.7				
Apr. 23, 1965	1300	77	49.0				
May 11, 1965	1740	69	11.9				
May 26, 1965	1310	73	7.74				
June 27, 1965	1120	76	1.96				
Oct. 13, 1965	1055	55	7.68				
Oct. 29, 1965	1435	52	6.29				
Dec. 8, 1965	1700	41	2.60				
Jan. 12, 1966	1615	48	13.1				
Feb. 16, 1966	1645	36	53.5				
Mar. 14, 1966	1345	48	37.5				
Apr. 25, 1966	1415	61	221				
May 25, 1966	1215	67	88.1				
June 29, 1966	1220	79	9.86				
July 27, 1966	1130	81	.95				
Aug. 24, 1966	1140	77	.35				
Sept. 28, 1966	1245	65	.15				
Oct. 19, 1966	1635	54	.54				
Nov. 16, 1966	0955	46	.29				
Dec. 14, 1966	1150	42	.57				
Jan. 12, 1967	1115	41	.49				
Feb. 14, 1967	1400	45	6.40				
Mar. 2, 1967	1145	43	3.32				
Apr. 1, 1967	0925	60	54.2				
May 10, 1967	0945	60	91.3				
June 15, 1967	1135	77	21.6				
July 19, 1967	1425	81	8.23				
Aug. 29, 1967	1530	76	1.49				
Oct. 4, 1967	1525	70	.34				

COLDWATER CREEK BASIN

6-9365. Coldwater Creek near St. Louis, Mo.

Location.--Lat 38°48'50", long 90°13'50", in sec.16, T.47 N., R.7 E., on right wingwall on downstream side of bridge on U. S. Highway 67, 1.7 miles upstream from mouth, 3.5 miles south of West Alton, and 6.0 miles north of St. Louis city limits.

Drainage area.--43.6 sq mi.

Discharge records available.--September 1959 to July 1961, July 1962 to September 1965 (discontinued). Discharge measurements and partial gage-height record from June 1968 to September 1969.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 30, 1959	1305	36	12.5
Feb. 12, 1960	0910	33	19.0
Mar. 17, 1960	0935	34	26.2
July 6, 1960	1050	69	35.4
Aug. 19, 1960	1135	78	27.6
Sept. 21, 1960	1905	68	17.5
Oct. 28, 1960	0620	56	17.4
Nov. 18, 1960	0650	50	19.9
Jan. 5, 1961	1025	41	15.1
Feb. 24, 1961	0915	52	22.7
Mar. 10, 1961	1035	48	36.1
Mar. 24, 1961	1000	49	40.1
May 3, 1961	0920	59	24.0
May 5, 1961	0805	56	245
May 17, 1961	1445	56	793
June 1, 1961	1705	71	27.2
June 15, 1961	0900	69	21.8
July 3, 1961	1230	76	23.2
July 13, 1961	0855	71	102
July 28, 1961	1005	80	29.0
July 13, 1962	1050	81	29.7
Aug. 31, 1962	0940	76	17.4
Nov. 20, 1962	0935	51	17.0
Jan. 30, 1963	0745	33	17.1
Mar. 6, 1963	0825	40	33.8
Apr. 3, 1963	0940	62	36.8
May 1, 1963	0710	52	26.1
May 16, 1963	1310	65	180
June 21, 1963	1000	70	33.6
July 16, 1963	1350	85	17.3
July 31, 1963	0630	78	20.6
Aug. 7, 1963	0630	80	20.7
Sept. 10, 1963	0900	74	16.9
Sept. 11, 1963	1215	75	298
Oct. 15, 1963	1010	65	14.8
Nov. 12, 1963	1345	52	13.9
Dec. 3, 1963	1240	43	13.9
Dec. 19, 1963	1450	32	16.0
Jan. 7, 1964	1235	41	13.4
Jan. 29, 1964	1240	38	14.5
Feb. 12, 1964	0815	33	19.6
Feb. 25, 1964	0915	41	22.8
Mar. 13, 1964	0815	40	57.2
Mar. 24, 1964	1000	57	30.6
Apr. 3, 1964	0900	49	83.4
Apr. 14, 1964	1100	60	31.6
Apr. 30, 1964	0810	59	34.6
May 27, 1964	0800	74	45.1
June 10, 1964	0845	73	34.0
June 23, 1964	0815	78	34.1
July 29, 1964	0845	78	17.3
Aug. 13, 1964	1050	69	14.1
Sept. 18, 1964	1310	72	38.1
Oct. 1, 1964	1315	66	21.1
Oct. 23, 1964	0820	57	12.6
Nov. 18, 1964	1305	60	34.5
Dec. 30, 1964	1200	46	42.5
Jan. 13, 1965	1130	45	26.0
Jan. 28, 1965	1235	45	21.8
Feb. 11, 1965	0950	50	33.8
Feb. 26, 1965	1125	41	25.7
Mar. 10, 1965	0820	45	26.7
Mar. 24, 1965	1025	80	26.0
Apr. 16, 1965	1350	60	42.7
Apr. 26, 1965	1320	58	44.6
May 14, 1965	0715	66	20.9
June 8, 1965	0720	70	21.0
June 21, 1965	1300	70	67.7
June 24. 1965	0845	71	35.9
July 14, 1965	0955	76	27.0
July 28, 1965	0725	73	20.8
Aug. 10, 1965	0815	72	15.9
Sept. 2, 1965	1025	71	17.6
Oct. 6, 1965	0645	62	16.5

MISSISSIPPI RIVER MAIN STEM

7-0100. Mississippi River at St. Louis, Mo.

Location.--Lat 38°37'44", long 90°10'47", on downstream side of west pier of Eads Bridge at St. Louis, 15 miles downstream from Missouri River, 19.2 miles upstream from Meramec River, and at mile 180.0 above Ohio River.

Drainage area.--701,000 sq mi, approximately.

Discharge records available.--January 1861 to September 1969.

Maximum temperature measured.--89° Fahrenheit.

Remarks.--Water temperature measured, generally between 0900 and 1600 o'clock.

Temperature (°F) of water, water year October 1951 to September 1952

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	64	67	--	70	70	67	--	62	--	--	62	63	--	--	61	64	63	63	60	--	--	60	58	57	56	57	--	54	54	55	51	--
November......	49	46	--	42	42	38	38	37	39	--	42	43	47	47	47	46	--	44	42	42	43	--	42	--	39	39	39	40	40	43	--	42
December......	--	42	44	43	43	45	45	--	42	41	40	41	37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	36	--	--
January.......	35	33	33	--	32	--	32	34	35	33	33	--	42	38	35	35	41	38	--	38	36	36	34	--	34	--	34	33	33	33	35	35
February......	--	--	35	37	39	38	36	34	36	--	39	39	40	38	37	--	37	38	41	39	38	38	37	--	37	38	38	39	38	--	--	38
March.........	38	--	38	38	36	37	37	38	--	41	41	41	41	40	40	--	40	--	41	45	42	44	--	41	43	41	41	42	43	--	46	41
April.........	48	48	49	49	48	--	47	48	50	48	47	--	--	46	46	47	48	48	50	--	51	54	56	56	57	58	--	62	62	--	--	51
May...........	65	68	68	--	70	70	--	--	68	67	--	--	63	62	63	64	62	--	60	60	60	62	64	--	--	68	67	--	69	--	--	--
June..........	--	71	--	73	74	75	--	--	--	78	--	81	82	81	--	81	81	81	--	81	--	81	80	79	78	79	79	--	82	--	--	--
July..........	85	--	83	81	81	81	83	80	80	81	--	--	--	79	80	80	81	80	79	--	82	83	83	83	83	82	--	85	82	83	83	82
August........	80	81	--	79	79	78	78	--	79	--	78	78	79	78	78	78	--	79	79	80	79	78	75	--	77	77	77	78	79	77	--	78
September.....	77	74	73	72	73	72	--	74	74	77	76	70	--	77	76	74	73	75	72	72	--	70	68	69	67	69	--	70	70	70	--	72

Temperature (°F) of water, water year October 1952 to September 1953

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	71	68	75	--	64	57	59	60	59	59	--	58	62	57	58	58	54	--	--	52	51	52	53	54	54	--	55	49	50	51	50	57
November......	--	52	51	50	52	50	49	48	--	48	--	--	--	47	--	--	54	52	50	50	49	--	47	47	48	45	--	40	--	--	--	--
December......	38	--	36	38	40	40	--	42	43	38	40	40	--	36	36	--	38	37	36	37	--	37	37	36	--	35	--	34	35	35	35	--
January.......	--	35	34	--	34	34	32	32	35	35	--	34	--	41	41	36	--	--	38	36	36	35	36	36	--	38	39	35	36	39	42	--
February......	--	40	37	37	37	39	40	--	40	39	40	39	38	38	--	39	37	38	38	41	--	38	38	38	38	39	--	--	--	--	--	39
March.........	--	--	--	37	39	39	--	42	38	--	41	45	44	46	--	47	46	48	48	52	--	51	51	50	48	48	49	--	48	48	50	--
April.........	48	48	47	--	--	48	50	50	52	52	--	50	51	50	--	47	47	46	--	47	48	50	52	54	--	54	54	55	56	57	--	51
May...........	58	--	--	59	59	58	58	57	57	--	60	61	58	59	60	--	--	--	63	64	68	69	--	--	70	73	71	72	72	--	74	--
June..........	74	75	75	76	--	--	76	78	79	80	80	80	--	80	78	80	80	80	82	--	80	82	81	81	82	78	80	--	81	81	--	79
July..........	82	82	79	81	--	82	80	80	80	78	--	78	77	79	80	78	79	79	--	83	82	84	85	82	--	82	84	85	84	85	86	81
August........	--	85	85	84	80	81	82	--	80	79	76	78	78	79	--	78	77	76	76	74	76	--	77	77	79	78	79	78	--	--	81	79
September.....	80	--	81	76	--	--	--	76	--	73	75	72	--	70	72	71	70	70	--	--	69	69	68	68	69	--	68	68	71	70	--	--

Temperature (°F) of water, water year October 1953 to September 1954

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	69	70	69	--	66	64	63	63	64	63	--	62	63	63	63	63	--	64	63	65	65	65	64	--	60	60	59	57	56	57	55	63
November......	--	57	--	55	52	51	48	--	48	46	47	47	47	48	--	52	51	50	52	52	--	50	48	48	46	43	43	41	--	43	--	48
December......	42	43	44	44	40	--	44	45	--	40	38	41	--	37	38	37	34	32	--	36	36	--	32	32	--	33	34	32	34	33	34	37
January.......	--	36	36	35	36	36	38	37	--	33	33	--	32	33	32	--	32	32	34	38	32	32	--	--	34	33	32	32	34	--	34	--
February......	35	36	35	36	37	35	--	36	38	38	38	36	--	--	43	44	41	43	43	--	44	43	44	42	44	43	--	41	--	--	--	40
March.........	40	40	38	37	36	--	37	39	44	41	41	45	--	41	40	41	41	42	44	--	41	42	42	44	47	47	--	49	45	45	44	42
April.........	44	47	--	47	49	50	53	52	52	--	--	55	55	58	60	58	--	--	60	61	62	61	60	--	--	--	65	64	64	65	--	--
May...........	--	--	62	--	60	58	57	--	--	56	57	57	58	59	--	--	64	61	60	64	61	--	--	65	65	66	67	69	--	--	--	--
June..........	70	68	66	64	--	--	67	68	--	69	72	--	--	78	79	79	80	80	--	--	82	81	82	81	81	--	--	82	81	80	--	--
July..........	82	82	--	--	--	83	83	82	80	--	--	81	82	83	82	81	--	--	83	83	84	84	83	--	--	80	80	81	--	82	--	--
August........	--	80	81	81	80	80	--	--	78	78	--	75	74	--	--	81	79	--	78	80	--	--	82	80	--	82	82	--	--	81	78	--
September.....	--	79	79	--	--	--	79	78	77	75	--	--	73	73	73	--	75	--	--	75	70	--	70	69	--	--	70	71	--	70	--	--

7-0100. Mississippi River at St. Louis, Mo.--Continued

Temperature (°F) of water, water year October 1954 to September 1955

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October........	72	--	--	74	--	70	68	66	--	--	66	66	66	64	61	--	--	--	57	--	55	55	--	--	55	56	--	53	52	--	--	--
November.......	50	46	--	45	44	--	--	48	47	--	--	48	--	--	49	49	--	50	48	--	--	46	46	45	--	--	--	--	42	40	--	--
December.......	--	40	40	--	--	38	37	--	36	36	--	--	36	--	36	36	35	--	--	33	--	33	36	--	--	--	38	37	--	35	36	--
January........	--	--	37	39	--	38	37	--	--	--	36	--	34	33	--	--	35	33	--	33	34	--	--	32	32	--	--	--	--	--	--	--
February.......	32	32	32	--	--	--	32	32	--	--	--	--	--	32	33	--	33	33	--	--	--	37	35	--	35	--	--	38	--	--	--	--
March..........	39	--	41	40	--	--	39	--	42	44	44	--	--	47	--	46	44	44	--	--	--	42	43	43	42	--	--	38	40	--	43	--
April..........	44	--	--	49	50	50	--	51	--	--	54	56	--	55	58	--	--	62	62	--	64	64	--	--	60	--	61	--	62	--	--	--
May............	--	64	--	68	--	68	--	--	66	--	65	--	64	--	--	66	--	66	--	67	--	--	70	73	73	--	71	--	--	--	69	--
June...........	68	--	70	--	--	71	--	72	--	70	--	--	65	--	64	--	70	--	--	74	--	76	--	76	--	--	--	73	74	--	--	--
July...........	78	--	--	--	80	80	--	81	--	--	81	--	82	--	82	--	--	82	--	84	--	85	--	--	85	--	86	--	87	--	--	--
August.........	--	80	--	--	--	--	--	--	82	84	--	80	--	--	82	--	--	81	82	--	--	--	--	--	--	83	--	--	82	--	79	--
September......	--	75	--	--	--	--	78	--	76	--	--	--	72	74	--	76	--	--	--	77	78	--	75	--	--	--	--	--	--	70	--	--

Temperature (°F) of water, water year October 1955 to September 1956

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October........	68	--	--	68	--	67	--	--	--	65	--	--	62	--	61	--	59	--	--	57	--	58	--	--	55	--	57	--	54	--	53	--
November.......	--	--	46	--	48	--	--	43	--	--	49	48	--	--	52	--	--	42	40	--	--	44	--	--	44	42	--	--	--	--	--	--
December.......	--	38	--	--	--	34	--	--	33	--	--	--	32	--	--	--	--	--	--	--	--	--	--	--	--	--	36	--	--	34	--	--
January........	--	--	34	--	35	36	--	--	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February.......	--	--	--	--	--	--	--	35	--	--	--	--	--	37	--	--	36	--	--	39	36	--	--	38	--	--	42	--	41	--	--	--
March..........	--	--	--	--	--	48	45	--	--	44	--	--	--	--	--	--	--	--	--	--	42	--	--	--	--	--	--	49	--	48	--	--
April..........	--	--	56	--	--	--	--	--	--	47	46	--	--	--	--	--	--	--	--	--	--	--	50	--	--	--	--	--	--	--	--	---
May............	52	53	56	--	--	--	--	--	61	--	--	--	--	67	65	--	--	66	--	--	--	70	69	68	67	--	--	70	--	--	--	--
June...........	70	--	--	71	--	73	--	75	--	--	78	--	78	--	77	--	--	--	81	81	82	--	--	--	--	--	--	80	82	--	--	--
July...........	--	83	--	--	79	80	--	--	77	--	78	78	78	--	--	81	--	80	80	80	--	--	78	--	80	--	84	--	--	80	--	--
August.........	82	--	79	--	--	85	--	83	81	80	--	--	81	--	82	80	81	--	--	76	--	75	--	76	--	--	77	--	78	--	78	--
September......	--	--	--	77	--	73	71	--	--	70	--	73	73	73	--	--	73	71	71	--	69	--	--	69	--	70	--	--	--	--	--	--

Temperature (°F) of water, water year October 1956 to September 1957

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October........	--	69	--	--	68	--	--	--	63	61	--	61	--	--	64	64	65	--	--	--	--	65	--	65	--	62	--	--	61	--	60	--
November.......	--	60	--	--	58	--	57	--	54	--	--	--	--	--	--	--	--	--	49	--	46	--	41	--	--	--	39	--	--	--	--	--
December.......	--	--	43	--	45	--	42	--	--	--	42	40	--	37	--	--	--	37	38	--	38	--	--	--	--	38	--	--	--	--	--	--
January........	--	37	--	--	--	--	--	--	38	--	--	--	--	--	--	--	32	--	36	--	38	--	34	--	36	--	--	--	--	35	35	--
February.......	35	--	--	--	--	--	35	35	--	--	38	--	--	--	--	--	--	39	--	41	--	--	--	--	48	--	41	45	--	--	--	--
March..........	45	--	--	42	--	43	--	41	--	--	--	--	46	49	46	--	--	50	--	48	--	46	--	--	--	47	46	46	49	--	--	--
April..........	--	--	46	--	--	47	--	--	49	--	--	--	--	--	--	51	--	--	55	--	--	60	64	--	66	67	--	--	--	--	--	--
May............	--	--	65	--	--	65	66	--	--	--	68	--	70	--	--	--	60	--	--	65	--	--	--	--	--	--	--	--	70	--	70	--
June...........	--	--	71	72	72	--	74	--	--	74	--	76	76	76	75	--	76	--	78	--	80	80	--	78	--	77	--	77	--	--	--	--
July...........	--	80	78	--	76	--	--	81	--	81	--	--	--	--	85	--	84	--	86	--	--	86	--	82	--	--	--	--	80	80	82	--
August.........	--	85	--	--	82	--	80	--	80	--	--	--	82	--	--	--	82	--	82	--	86	82	--	--	--	81	--	81	--	82	--	--
September......	--	--	78	79	--	75	--	--	74	--	73	--	--	--	--	71	--	--	--	76	--	--	72	--	72	--	--	--	--	--	--	--

7-100. Mississippi River at St. Louis, Mo.--Continued

Temperature (°F) of water, water year October 1963 to September 1964

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October	--	--	--	--	--	--	--	69	--	--	--	--	--	--	--	--	--	--	--	--	70	--	--	--	--	--	--	--	64	--	--	--
November	--	--	--	--	--	--	56	--	--	--	52	--	48	47	--	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December	--	--	--	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January	--	--	34	--	--	36	--	--	--	--	--	--	--	--	32	--	--	--	--	--	37	--	--	--	--	--	--	--	--	37	--	--
February	--	--	--	--	38	--	--	--	--	--	35	--	--	--	--	--	--	38	--	--	--	--	--	--	38	--	--	--	--	--	--	--
March	--	--	44	--	--	--	--	--	--	--	--	--	42	--	--	--	--	--	44	44	--	43	--	48	44	--	--	--	--	--	43	--
April	--	--	--	--	--	--	--	--	46	47	51	50	51	--	--	--	--	--	--	--	--	59	--	--	--	--	--	61	--	--	--	--
May	--	--	--	--	--	--	--	68	--	--	--	--	--	--	--	--	--	--	74	--	--	--	--	--	76	--	--	--	--	--	--	--
June	--	69	--	--	--	--	--	--	72	--	--	--	--	--	--	--	75	--	76	--	--	--	--	--	78	78	--	--	--	79	--	--
July	--	--	--	--	--	--	--	--	--	80	--	--	--	--	78	--	--	--	--	--	--	--	84	--	--	--	--	86	--	--	--	--
August	--	--	--	--	85	--	--	--	--	--	--	79	--	--	--	--	--	--	--	79	--	--	--	--	--	--	74	--	--	--	--	--
September	77	--	--	--	--	--	--	--	--	78	--	--	--	74	--	--	--	--	--	--	--	74	--	--	--	--	--	--	--	--	--	--

Temperature (°F) of water, water year October 1964 to September 1965

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October	--	--	--	--	--	--	--	--	--	--	--	--	55	62	--	--	--	--	--	51	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57	--	--	--	--	--	43	--	--	--	--	--	--	--	--
December	--	38	--	--	--	--	38	38	--	--	--	--	--	--	34	--	--	--	--	--	--	33	--	36	--	--	--	--	35	--	38	--
January	--	--	--	36	39	--	--	44	--	--	40	41	--	--	--	--	--	--	33	--	--	--	--	--	--	--	--	33	--	--	--	--
February	--	--	--	--	--	--	--	--	--	37	--	--	--	--	--	37	39	--	--	--	--	--	36	--	--	--	--	--	--	--	--	--
March	--	35	37	--	--	--	--	--	35	--	--	--	--	--	--	41	--	--	--	--	--	--	35	--	--	--	--	--	38	--	--	--
April	--	--	--	--	--	--	--	53	--	--	--	--	53	--	--	--	--	--	--	--	--	56	63	--	--	--	--	53	--	--	--	--
May	--	--	--	--	63	65	--	--	--	--	--	--	--	--	--	--	--	70	--	--	--	--	--	--	74	--	--	--	--	--	--	--
June	--	--	69	--	--	--	--	74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	74	--	--	--	--	--	80	--	--	--
July	--	--	--	--	--	--	--	78	--	--	--	--	83	78	--	--	--	--	--	--	--	--	--	78	--	--	--	--	--	--	--	--
August	--	--	--	--	80	--	--	--	--	80	--	--	--	--	--	--	--	--	82	--	--	--	--	82	--	--	--	--	--	--	--	--
September	74	--	--	--	--	--	--	--	75	--	--	--	--	--	74	--	--	--	--	75	--	--	--	--	--	--	--	--	64	--	--	--

Temperature (°F) of water, water year October 1965 to September 1966

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October	63	--	--	--	--	--	61	--	--	--	--	--	--	--	60	--	--	62	--	--	--	--	--	--	--	--	--	58	--	--	--	--
November	--	55	--	--	--	--	--	--	56	--	--	--	--	--	--	56	--	--	--	--	--	51	--	--	--	--	--	--	--	--	--	--
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	42	--	--	--	--	--	--	42	--	--	--	--	--	--	38	--	--	--
January	--	--	--	--	--	--	--	--	--	--	--	37	--	--	--	--	--	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	38	--	--	--	--	--	--	--	33	--	--	--	--	--	--	--	--	--
March	--	42	--	--	--	--	--	--	37	--	--	--	--	--	46	--	--	--	--	--	--	--	53	--	--	--	--	--	--	48	--	--
April	--	--	--	--	--	46	--	--	--	--	--	--	49	--	--	--	--	--	--	58	--	--	--	--	--	--	57	--	--	--	--	--
May	--	--	--	59	--	--	--	--	--	62	--	--	--	--	--	--	--	60	--	--	--	--	--	68	--	--	--	--	--	--	--	--
June	--	73	--	--	--	71	--	--	--	--	--	--	--	--	72	--	--	--	--	76	--	--	--	--	--	--	82	--	--	--	--	--
July	--	--	--	--	--	87	--	--	--	--	--	--	--	--	--	--	--	88	--	--	--	--	--	--	78	--	--	--	--	--	--	--
August	81	--	--	--	--	--	--	80	--	--	--	--	--	--	--	--	81	--	--	--	--	80	--	--	--	--	--	--	77	--	--	--
September	--	--	--	--	--	79	--	--	--	--	--	76	--	--	--	--	--	--	67	--	--	--	--	--	--	62	--	--	--	--	--	--

7-100. Mississippi River at St. Louis, Mo.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	--	--	62	--	--	--	--	--	--	64	--	--	--	--	--	--	55	--	--	--	--	--	--	53	--	--	--	--	--	--	--	--
November......	--	--	--	--	--	--	53	--	--	--	--	--	--	--	--	--	--	--	--	--	47	--	--	--	--	--	--	46	--	--	--	--
December......	--	--	--	--	41	--	--	--	--	--	--	--	--	--	40	--	--	--	40	--	--	--	--	--	--	--	--	35	--	--	--	--
January.......	--	--	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	37	--	--	--	--	44	--	--	--	--	--	37	--	--
February......	--	--	--	--	--	--	--	--	--	39	--	--	--	38	--	--	--	--	--	--	33	--	--	--	--	--	--	35	--	--	--	--
March.........	--	--	--	--	--	--	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	--	--	--	--
April.........	--	--	50	--	60	--	--	--	--	--	--	--	59	--	--	--	--	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May...........	--	--	62	--	--	--	--	--	56	--	--	--	--	--	--	--	61	--	--	--	--	--	64	--	--	--	--	--	--	--	--	--
June..........	71	--	--	--	--	--	--	--	--	--	--	--	76	--	--	--	--	--	--	81	--	--	--	--	--	--	75	--	--	--	--	--
July..........	--	--	--	--	--	--	--	--	--	--	--	--	--	73	--	--	--	75	--	--	--	--	--	--	81	--	--	--	--	--	--	--
August........	84	--	--	--	--	--	83	--	--	--	--	--	--	74	--	--	--	--	--	--	77	--	--	--	--	--	--	--	76	--	--	--
September.....	--	--	--	--	--	--	--	74	--	--	--	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	65	--	--	--	--	--

Temperature (°F) of water, water year October 1967 to September 1968

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	--	--	66	--	--	--	--	--	--	62	--	--	--	--	--	--	--	--	--	--	--	--	--	60	--	--	--	--	--	--	56	--
November......	--	--	--	--	--	--	46	--	--	--	--	--	--	--	--	--	--	--	--	--	48	--	--	--	--	--	--	--	--	41	--	--
December......	--	--	--	--	--	--	42	--	--	--	--	44	--	--	--	--	--	--	42	--	48	--	--	--	--	--	--	--	--	--	--	--
January.......	--	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	--	--	--	40	--
February......	--	--	--	--	--	--	--	--	--	--	--	36	--	--	--	--	--	--	36	--	--	--	--	--	--	--	36	--	--	--	--	--
March.........	--	--	--	--	--	--	--	--	--	--	42	--	--	--	--	--	--	--	48	--	--	--	--	--	48	--	--	--	--	--	--	--
April.........	--	--	--	--	--	--	--	--	--	--	--	--	56	--	60	--	--	--	--	--	--	64	--	--	--	--	--	--	60	--	--	--
May...........	--	--	--	--	--	--	--	64	--	--	--	--	--	66	--	--	--	--	--	62	--	--	--	--	--	--	60	--	--	--	--	--
June..........	--	--	--	--	--	--	--	--	--	--	72	--	--	--	--	--	--	77	--	--	--	--	--	--	78	--	--	--	--	--	--	--
July..........	--	82	--	--	--	--	--	--	--	78	--	--	--	--	--	82	--	--	--	--	--	--	--	--	--	80	--	--	82	--	--	--
August........	--	--	--	--	--	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	86	--	--	--	--	--	--	--	--	--	--	--
September.....	--	--	--	--	--	--	--	--	--	--	70	--	--	--	--	72	--	--	--	--	--	--	74	--	--	--	--	--	--	--	--	--

Temperature (°F) of water, water year October 1968 to September 1969

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	--	--	--	--	--	--	--	--	62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57	--	--	--	--	--	--	--	--
November......	--	--	--	55	--	--	--	--	--	--	--	--	44	--	--	--	--	42	--	--	--	--	--	--	46	--	--	--	--	--	--	--
December......	--	--	--	--	--	--	--	--	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	32	--
January.......	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33	--	--	--	--	--	--	--	35	--	--	--	--	--	--	--	--	--
February......	--	--	--	--	34	--	--	--	--	--	35	--	--	--	--	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March.........	--	--	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33	--	--	--	--	--	--	--
April.........	43	--	--	--	--	--	48	--	--	--	--	--	--	--	54	--	--	--	--	--	--	--	--	--	--	--	--	--	55	--	--	--
May...........	--	--	--	--	--	--	--	64	--	--	--	--	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	66	--	--	--	--
June..........	--	--	--	--	--	--	--	--	70	--	--	--	--	--	--	68	--	--	--	--	--	--	--	71	--	--	--	--	--	--	--	--
July..........	--	--	77	--	--	--	78	--	--	--	--	--	--	80	--	--	--	--	--	--	--	81	--	--	--	--	--	--	79	--	--	--
August........	--	--	--	79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	79	--	--	--	78	--	--	--	--	--	--
September.....	--	--	--	78	--	--	--	--	74	--	--	--	--	--	73	--	--	--	--	--	--	--	--	68	--	--	--	--	--	70	--	--

7-0100. Mississippi River at St. Louis, Mo.--Continued

Temperature (°F) of water, water year October 1957 to September 1958

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	--	--	--	67	--	--	62	--	--	62	60	--	--	61	--	64	--	60	--	--	58	--	67	--	--	52	--	53	--	54	--	--
November......	54	--	--	51	--	--	--	--	--	--	46	--	48	--	49	--	--	50	--	--	44	41	--	--	40	--	44	--	--	--	--	--
December......	--	48	--	44	--	48	--	--	--	--	--	--	--	--	--	36	--	--	--	51	--	--	--	--	--	--	40	--	--	--	--	--
January.........	--	--	--	--	--	--	--	--	--	43	--	--	--	--	34	--	35	--	--	--	--	36	--	--	--	--	--	--	--	--	--	--
February......	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	38	--	--	--	--	--	--	--	--
March.........	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	47	--
April.........	--	--	51	52	--	--	50	--	50	--	52	52	--	47	56	--	--	62	--	--	62	--	61	--	60	--	--	58	56	--	--	--
May...........	61	62	--	--	57	56	58	--	62	--	--	67	67	68	--	72	--	--	72	--	74	76	69	--	--	72	--	70	--	--	--	--
June..........	--	70	--	74	--	74	--	--	77	--	--	77	--	--	--	72	73	--	74	--	--	--	72	--	72	--	72	--	--	74	--	--
July..........	74	77	78	--	--	--	78	78	--	--	79	--	--	79	--	--	--	75	--	--	--	--	--	--	--	--	--	78	--	--	--	--
August........	--	--	--	80	80	81	80	84	--	--	85	--	84	--	84	--	--	82	--	84	--	82	--	--	76	--	77	--	79	--	--	--
September.....	--	77	79	78	80	--	--	78	78	77	--	74	--	--	--	75	--	71	70	--	--	72	--	72	--	73	--	--	68	--	--	--

Temperature (°F) of water, water year October 1958 to September 1959

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	65	--	64	--	--	--	--	68	--	--	--	--	64	--	65	66	66	--	--	66	--	--	--	--	--	--	59	--	57	--	57	--
November......	--	--	56	--	56	--	53	--	--	--	--	55	--	56	--	--	58	--	--	55	--	--	--	--	--	47	--	--	--	--	--	--
December......	42	--	40	--	--	--	--	--	--	--	--	--	--	--	--	33	33	35	37	--	--	--	--	34	--	--	--	--	47	--	35	--
January.......	--	35	--	--	--	--	--	--	--	--	--	--	35	37	33	--	--	--	--	--	--	--	--	--	--	32	33	32	34	--	--	--
February......	--	--	--	--	--	--	--	--	36	38	--	36	37	--	--	36	36	--	--	--	--	--	35	--	36	38	40	--	--	--	--	--
March.........	--	41	--	40	--	37	--	--	38	--	37	38	39	--	--	41	--	42	45	44	--	--	46	46	47	49	--	--	--	46	47	--
April.........	--	47	48	--	--	50	--	51	--	48	--	--	48	50	52	--	55	--	--	53	--	52	56	57	--	--	--	58	61	--	--	--
May...........	63	--	--	68	--	70	68	68	--	--	68	--	--	66	65	--	--	64	66	67	69	69	--	--	69	--	70	70	72	--	--	--
June..........	74	73	73	--	74	74	--	--	--	74	--	79	--	--	76	--	78	78	78	--	--	80	--	79	--	82	--	--	84	--	--	--
July..........	82	80	--	--	--	78	--	78	78	80	--	--	80	--	81	--	80	--	--	80	--	--	79	--	--	--	--	--	--	85	83	--
August........	--	--	83	--	83	81	81	--	79	79	78	--	80	--	82	--	80	--	82	77	83	--	--	84	--	--	84	83	--	--	83	--
September.....	--	81	--	80	--	--	83	83	--	76	72	--	--	74	75	--	--	--	--	--	71	--	71	--	72	--	--	70	--	67	--	--

Temperature (°F) of water, water year October 1959 to September 1960

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October.......	--	68	--	--	66	--	--	64	62	60	60	58	--	57	--	59	--	--	57	--	56	--	60	--	--	55	52	53	--	54	--	--
November......	--	--	52	53	51	46	--	--	47	47	--	--	42	--	--	40	--	36	--	38	--	--	38	40	37	--	36	--	--	36	--	--
December......	37	37	38	39	--	--	35	--	--	--	39	--	--	39	--	41	--	38	--	--	38	--	39	--	--	--	--	40	--	39	37	--
January.......	--	--	--	34	--	33	34	38	--	--	38	--	39	40	38	37	35	--	34	32	--	--	--	--	--	--	34	--	32	33	--	--
February......	34	34	34	35	36	--	--	35	36	36	--	--	--	--	36	--	35	--	33	--	--	--	34	34	32	--	--	--	32	--	--	--
March.........	32	--	--	--	--	--	--	--	--	--	--	--	--	32	32	35	34	--	--	--	34	37	36	--	--	41	43	45	44	44	--	--
April.........	46	45	44	--	43	--	45	--	44	--	48	--	51	--	--	--	--	56	--	57	--	59	--	--	--	62	--	63	63	--	--	--
May...........	--	60	--	60	--	--	--	--	59	--	55	--	56	--	--	61	62	63	--	65	--	--	66	--	69	69	68	--	--	--	68	--
June..........	69	--	72	--	--	--	73	--	73	74	--	--	74	--	72	--	70	--	--	--	--	--	75	74	--	--	74	74	75	--	--	--
July..........	76	74	--	--	75	76	--	77	--	--	78	79	80	--	--	78	--	--	80	80	--	81	--	--	81	--	83	--	83	--	--	--
August........	--	83	--	83	82	--	--	84	83	--	--	79	--	--	79	--	79	--	79	--	--	79	81	--	--	80	--	--	--	82	83	--
September.....	--	83	--	--	--	--	85	--	82	--	--	76	--	75	--	74	--	--	74	74	--	--	74	--	--	73	--	70	--	68	--	--

MISSISSIPPI RIVER MAIN STEM

7-100. Mississippi River at St. Louis, Mo.--Continued

Temperature (°F) of water, water year October 1960 to September 1961

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October	--	--	67	66	--	--	65	--	--	66	65	--	--	66	--	--	--	65	61	--	--	--	--	57	57	--	56	--	--	--	54	--
November	--	53	--	52	--	--	50	48	--	44	--	--	--	46	--	49	--	48	--	--	46	47	--	--	45	--	--	--	--	--	--	--
December	--	40	--	--	43	42	--	--	38	--	--	--	--	35	35	--	--	--	34	--	--	--	--	--	--	--	33	--	33	--	--	--
January	34	--	--	33	--	35	--	--	32	34	--	--	36	--	--	36	--	36	--	--	--	--	--	--	--	--	--	--	--	--	32	--
February	32	--	--	--	--	--	--	--	32	32	--	--	36	35	--	36	36	--	--	37	36	--	38	38	--	--	38	36	--	--	--	--
March	37	--	40	--	--	45	44	--	42	41	--	--	43	--	43	--	43	--	--	42	42	42	--	40	--	--	--	46	46	--	46	--
April	--	--	--	--	46	46	46	--	--	--	46	45	--	46	--	--	--	--	46	--	51	--	--	56	--	58	--	58	--	--	--	--
May	55	55	--	--	55	--	--	58	--	58	59	62	62	--	--	63	63	--	62	--	--	62	--	64	--	--	--	--	66	--	67	--
June	--	70	--	--	72	--	74	--	74	--	--	78	--	79	--	73	--	--	74	73	--	--	73	--	--	74	--	--	77	76	--	--
July	--	--	76	--	78	--	78	--	--	77	--	78	--	78	--	--	79	--	79	--	79	--	--	79	--	--	79	79	--	--	82	--
August	--	--	--	--	--	--	--	82	--	81	--	--	--	78	--	80	--	80	--	--	--	--	80	75	75	--	--	78	--	79	--	--
September	78	--	--	--	81	--	79	78	--	--	78	79	--	--	72	--	--	66	66	66	--	68	--	--	69	--	64	--	62	--	--	--

Temperature (°F) of water, water year October 1961 to September 1962

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October	--	60	--	--	60	--	--	--	63	--	64	--	65	--	--	62	62	--	--	58	--	--	57	--	56	--	54	--	--	--	--	--
November	57	--	57	--	--	--	51	--	48	--	--	--	48	--	48	--	46	--	--	42	--	42	--	42	--	--	41	--	--	--	--	--
December	--	--	--	--	42	43	--	--	--	--	--	--	--	--	32	--	--	--	--	--	--	36	--	--	--	--	--	--	--	--	--	--
January	--	32	--	--	34	--	--	32	--	--	--	32	--	--	--	--	--	--	32	--	--	--	32	--	--	34	--	--	33	33	--	--
February	--	33	--	--	--	--	--	33	--	--	--	34	36	--	--	36	--	--	--	35	35	--	--	--	--	34	--	--	--	--	--	--
March	--	32	--	--	--	--	32	--	34	--	--	38	--	--	34	--	--	--	38	--	--	40	40	--	--	41	--	44	--	44	--	--
April	--	44	44	--	45	--	--	--	--	46	--	48	--	--	--	--	48	--	51	51	--	--	54	55	56	--	60	--	--	64	--	--
May	--	63	--	66	--	--	66	--	67	--	68	--	--	69	69	--	--	71	--	--	75	--	--	--	76	--	--	--	75	--	--	--
June	73	--	--	71	--	72	--	73	--	--	73	--	--	--	74	--	--	76	--	77	--	79	--	--	78	--	79	--	80	--	--	--
July	--	--	82	--	--	82	--	--	80	--	82	--	83	--	--	84	--	--	--	80	--	--	80	--	80	--	77	--	--	--	77	--
August	--	--	78	--	--	78	78	--	--	79	--	--	78	--	--	--	78	--	--	--	--	--	--	80	--	--	--	79	--	--	78	--
September	--	--	--	--	74	--	72	--	--	71	--	--	--	73	--	--	73	--	73	--	69	--	--	68	--	68	--	66	--	--	--	--

Temperature (°F) of water, water year October 1962 to September 1963

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
October	64	--	64	--	65	--	--	65	67	66	67	68	--	--	--	69	--	--	67	--	--	66	--	--	--	--	--	--	55	--	53	--
November	--	--	--	--	--	--	--	--	47	--	--	--	46	48	--	49	--	--	46	--	48	--	46	--	--	44	--	44	--	46	--	--
December	--	--	47	--	43	--	--	--	--	--	--	--	--	33	--	--	--	--	--	34	--	--	--	--	--	--	--	39	--	--	--	--
January	--	--	--	--	--	--	33	--	36	--	--	--	--	--	--	--	--	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February	33	--	--	--	--	34	--	--	--	--	--	--	--	--	--	--	--	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March	34	--	--	--	--	--	--	37	--	--	39	--	--	--	--	--	--	40	--	--	--	41	--	--	--	--	47	--	--	--	--	--
April	--	56	--	--	--	--	--	57	--	--	--	54	--	--	--	58	61	63	64	62	--	--	--	--	--	--	--	--	60	--	--	--
May	--	--	59	--	--	--	--	--	--	70	--	--	68	--	--	--	68	--	--	66	--	--	--	65	--	--	--	--	--	--	--	--
June	--	--	71	--	--	76	--	--	--	82	--	--	--	79	--	--	78	--	79	--	--	--	--	78	--	--	--	82	--	--	--	--
July	83	--	--	--	81	--	--	81	--	--	--	--	--	--	--	81	--	--	83	--	--	84	--	--	--	83	--	--	82	--	--	--
August	--	--	--	--	--	84	--	--	85	--	--	--	80	--	--	78	--	--	--	--	--	--	76	--	--	76	--	--	--	78	--	--
September	--	--	78	--	--	75	--	--	--	--	--	--	73	--	--	--	--	74	--	--	--	--	--	72	--	--	--	--	--	66	--	--

GRAVOIS CREEK BASIN.

7-0101. Gravois Creek near Kirkwood, Mo.

Location. --T.44 N., R.6 W., at bridge on city route U. S. Highway 66, 1½ miles southeast of Kirkwood and 2.1 miles east of Lindbergh Boulevard, St. Louis County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 21, 1961	1020	72	0.97				
May 18, 1962	1140	80	3.09				
June 22, 1962	1540	81	3.18				
Nov. 9, 1962	0915	45	.99				
Aug. 14, 1963	0955	75	.25				
Oct. 1, 1963	0650	56	.07				
Nov. 12, 1963	0955	42	.10				
Sept. 11, 1964	1205	70	.30				
Oct. 21, 1964	1400	56	.09				
Oct. 23, 1964	1030	58	.09				
Sept. 6, 1967	0725	65	.02				
Oct. 24, 1968	0730	62	.18				

MERAMEC RIVER BASIN

7-0103.5 Meramec River at Cook Station, Mo.

Location.--Lat 37°49'45". long 91°26'15", in NE¼ sec.23, T.36 N., R.5 W., on downstream side of right pier of bridge on County Highway M, 50 ft downstream from Frisco Railroad bridge (Salem Branch), 1 mile north of Cook Station, and 4 miles upstream from Crooked Creek.

Drainage area.--199 sq mi.

Discharge records available.--October 1965 to September 1969.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 4, 1966	1050	42	245				
Feb. 7, 1966	1600	37	71.8				
Apr. 9, 1966	1340	66	29.1				
June 18, 1966	1040	72	24.8				
July 23, 1966	1315	78	11.8				
Sept. 3, 1966	1115	78	22.0				
Jan. 28, 1967	1320	41	346				
Feb. 20, 1967	1115	41	40.5				
Mar. 27, 1967	1250	55	101				
May 1, 1967	0915	59	485				
July 18, 1967	1020	69	16.6				
Aug. 25, 1967	1025	70	11.6				
Dec. 8, 1967	1530	46	116				
Feb. 19, 1968	1515	42	57.3				
Mar. 27, 1968	1535	58	136				
June 19, 1968	1425	73	36.9				
Sept. 12, 1968	1415	68	16.8				
Oct. 23, 1968	1305	57	20.2				
Dec. 19, 1968	1225	42	45.2				
Mar. 18, 1969	1115	47	68.9				
Apr. 29, 1969	1200	56	168				
June 17, 1969	1010	66	27.9				
Aug. 21, 1969	1610	76	25.4				

MERAMEC RIVER BASIN

7-0130. Meramec River near Steelville, Mo.

Location.—Lat 37°59'55", long 91°21'20", in NW¼ sec.22, T.38 N., R.4 W., on left bank 1,500 ft downstream from highway bridge, 0.3 mile upstream from Whittenburg Creek, 1½ miles north of Steelville, and at mile 146.1.

Drainage area.—781 sq mi.

Discharge records available.—October 1922 to September 1969. Prior to January 1923 monthly discharge only, published in WSP 1311. Gage-height records for 1916-33 at site 1 mile upstream in reports of U. S. Weather Bureau.

Maximum temperature measured.—85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 10, 1947	0835	49	313	Nov. 7, 1961	1410	52	246
June 7, 1948	1040	68	240	Dec. 7, 1961	1410	45	255
July 21, 1948	0810	74	361	Jan. 10, 1962	1600	32	384
Aug. 9, 1948	0845	73	170	Jan. 15, 1962	1545	34	1,390
Oct. 19, 1948	0910	49	179	Feb. 7, 1962	1715	41	412
Dec. 3, 1948	0850	45	175	Mar. 8, 1962	1220	33	408
Jan. 10, 1949	1215	43	261	Apr. 11, 1962	1510	52	1,340
May 18, 1949	0900	71	259	May 15, 1962	1345	70	352
July 18, 1949	1000	74	272	June 12, 1962	1620	45	420
June 4, 1950	1230	75	213	Oct. 16, 1962	1315	70	157
Oct. 18, 1950	1525	64	198	Nov. 15, 1962	1705	50	142
Nov. 29, 1950	1705	40	207	Dec. 12, 1962	1045	33	126
Feb. 6, 1951	1135	34	403	Jan. 18, 1963	0730	33	157
July 10, 1952	1350	78	202	Feb. 13, 1963	1320	40	144
Oct. 1, 1952	1330	65	158	Mar. 13, 1963	1530	50	307
Dec. 18, 1952	1400	41	170	Apr. 9, 1963	1450	63	351
June 18, 1953	1325	82	173	May 10, 1963	1635	74	267
Sept. 29, 1953	0850	68	116	June 11, 1963	1150	74	287
Nov. 17, 1953	0950	48	125	July 17, 1963	1135	81	125
Jan. 6, 1954	1250	42	123	Aug. 2, 1963	0610	72	153
Feb. 12, 1954	1010	41	120	Sept. 19, 1963	1550	72	112
Mar. 23, 1954	1430	39	133	Oct. 23, 1963	1350	65	118
May 5, 1954	1345	63	229	Nov. 18, 1963	1440	53	112
July 28, 1954	1315	80	110	Dec. 12, 1963	1625	36	125
Sept. 1, 1954	1310	76	95.3	Jan. 8, 1964	1220	42	133
Oct. 12, 1954	1350	67	222	Feb. 11, 1964	1555	40	140
Nov. 22, 1954	1545	37	181	Mar. 10, 1964	0710	41	6,380
Jan. 6, 1955	1530	51	312	May 21, 1964	1530	75	192
Feb. 15, 1955	1450	44	137	June 16, 1964	1345	76	441
Apr. 5, 1955	1400	55	335	July 16, 1964	1445	80	116
May 11, 1955	1400	58	184	Aug. 20, 1964	1810	76	109
July 26, 1955	1550	79	755	Sept. 14, 1964	1155	67	102
Sept. 23, 1955	1225	70	258	Oct. 16, 1964	0645	56	95.3
Oct. 27, 1955	1350	53	118	Nov. 23, 1964	1700	38	123
Nov. 30, 1955	1340	39	120	Dec. 16, 1964	1240	42	115
Feb. 16, 1956	1350	35	244	Jan. 13, 1965	1735	40	155
Mar. 15, 1956	1420	47	147	Feb. 18, 1965	1430	47	150
May 10, 1956	1155	68	225	Mar. 16, 1965	1150	51	186
July 12, 1956	0840	78	161	Apr. 14, 1965	1210	52	484
Aug. 16, 1956	0930	80	120	Apr. 23, 1965	0930	62	352
Sept. 13, 1956	1150	74	82.8	May 19, 1965	0830	70	140
Oct. 11, 1956	1135	58	78.3	June 29, 1965	1050	82	121
Nov. 7, 1956	1230	49	112	July 27, 1965	0840	76	111
Dec. 13, 1956	1330	40	215	Aug. 24, 1965	0830	80	94.0
Jan. 15, 1957	1500	33	123	Oct. 25, 1965	1120	54	134
July 18, 1957	1600	80	235	Sept. 27, 1965	1800	64	617
Sept. 17, 1958	1520	70	319	Nov. 30, 1965	1625	39	127
Nov. 14, 1958	0750	58	156	Dec. 30, 1965	0830	42	173
Dec. 18, 1958	1145	35	191	Jan. 20, 1966	1055	33	166
Jan. 21, 1959	1530	33	325	Mar. 8, 1966	1055	49	359
Nov. 16, 1959	1520	40	190	Apr. 6, 1966	1100	50	198
Jan. 21, 1960	1530	38	422	May 3, 1966	1145	61	815
July 26, 1960	1400	78	187	June 7, 1966	1440	68	253
Nov. 8, 1960	1100	52	141	July 12, 1966	1055	85	129
Dec. 28, 1960	1200	33	182	July 20, 1966	1000	74	154
Jan. 18, 1961	1540	45	151	Aug. 9, 1966	1220	74	169
Feb. 16, 1961	1515	48	389	Sept. 12, 1966	0920	67	118
Mar. 22, 1961	1140	49	784	Oct. 19, 1966	1350	54	186
May 9, 1961	0800	60	12,000	Nov. 15, 1966	0935	47	182
May 18, 1961	1015	61	1,590	Dec. 22, 1966	1500	44	187
June 14, 1961	1725	72	446	Feb. 20, 1967	1420	47	222
July 19, 1961	1710	76	297	Mar. 27, 1967	1530	58	394
Aug. 16, 1961	1050	80	190	Aug. 24, 1967	1115	69	133
Oct. 3, 1961	1415	59	2,020	Jan. 31, 1968	1310	47	4,290

Temperature and Discharge of Meramec River near Steelville, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 23, 1968	1105	40	307				
May 25, 1968	1250	58	6,240				
June 20, 1968	1110	70	276				
July 31, 1968	1205	72	213				
Aug. 29, 1968	1330	68	148				
Oct. 1, 1968	1505	67	159				
Oct. 23, 1968	1050	55	160				
Dec. 19, 1968	1010	46	269				
Mar. 13, 1969	1340	53	405				
Apr. 29, 1969	1005	56	630				
June 6, 1969	1120	69	234				
July 18, 1969	1030	77	181				
Aug. 21, 1969	1415	74	184				

MERAMEC RIVER BASIN

7-0131. Huzzah Creek at Dillard, Mo.

Location.--Lat 37°44'25", long 91°12'25", in NW¼NW¼ sec.19, T.35 N., R.2 W., 600 feet downstream from James Branch, 1,500 feet downstream from bridge on State Highway 49, and ¼ mile east of Dillard.

Drainage area.--92 sq mi.

Discharge records available.--Discharge measurements and daily gage readings available from November 1943 to June 1951. Records of discharge above 250 cfs published from November 1943 to September 1945. Discharge measurements only from June 1951 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 21, 1962	0920	74	42.1				
Dec. 18, 1962	0900	39	21.5				
June 4, 1963	0745	66	55.6				
Sept. 4, 1963	0915	73	16.1				
Oct. 1, 1963	0840	61	12.9				
Nov. 5, 1963	0935	57	18.6				
Oct. 20, 1964	1600	58	12.8				
Oct. 1, 1965	1015	65	31.5				
Jan. 25, 1966	1450	38	21.2				
Sept. 7, 1967	1505	73	8.43				
Oct. 23, 1967	1200	60	28.7				
June 20, 1968	1435	76	30.2				
Oct. 15, 1968	1055	68	19.1				
Oct. 21, 1968	1555	64	18.8				
Apr. 10, 1969	1055	55	176				
July 14, 1969	1600	86	17.4				

MERAMEC RIVER BASIN

7-0140. Huzzah Creek near Steelville, Mo.

Location.--S½ sec.25, T.38 N., R.3 W., at bridge on State Highway 8, 8 miles east of Steelville, Crawford County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 9, 1946	1200	54	126				
Oct. 18, 1950	1655	64	91.4				
May 17, 1961	1645	62	616				
Sept. 21, 1961	1025	70	59.6				
May 17, 1962	1100	70	182				
June 19, 1962	1740	52	82.7				
Aug. 23, 1962	1240	80	33.6				
Nov. 9, 1962	1530	49	60.7				
Aug. 15, 1963	1055	80	149				
Oct. 2, 1963	1535	68	34.2				
Nov. 6, 1963	1440	60	52.4				
Sept. 9, 1964	1505	79	25.8				
Oct. 20, 1964	1115	54	37.1				
Sept. 6, 1967	1000	65	31.4				
Oct. 21, 1968	1500	62	55.9				

MERAMEC RIVER BASIN

7-0140. Huzzah Creek near Steelville, Mo.

Location.--S½ sec.25, T.38 N., R.3 W., at bridge on State Highway 8, 8 miles east of Steelville, Crawford County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 9, 1946	1200	54	126				
Oct. 18, 1950	1655	64	91.4				
May 17, 1961	1645	62	616				
Sept. 21, 1961	1025	70	59.6				
May 17, 1962	1100	70	182				
June 19, 1962	1740	52	82.7				
Aug. 23, 1962	1240	80	33.6				
Nov. 9, 1962	1530	49	60.7				
Aug. 15, 1963	1055	80	149				
Oct. 2, 1963	1535	68	34.2				
Nov. 6, 1963	1440	60	52.4				
Sept. 9, 1964	1505	79	25.8				
Oct. 20, 1964	1115	54	37.1				
Sept. 6, 1967	1000	65	31.4				
Oct. 21, 1968	1500	62	55.9				

MERAMEC RIVER BASIN

7-0142. Courtois Creek at Berryman, Mo.

Location.--Lat 37°55'00", long 91°06'10", in SW¼SW¼ sec.13, T.37 N., R.2 W., at bridge on State Highway 8, 300 feet downstream from Lost Creek and ¼ mile west of Berryman.

Drainage area.--173 sq mi.

Discharge records available.--Discharge measurements and daily gage readings available from November 1943 to September 1951, and April 1958 to September 1969. Records of discharge above 400 cfs published from November 1943 to September 1945. Discharge measurements only from June 1951 to March 1958.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 21, 1961	1210	70	25.4				
May 17, 1962	1230	70	78.1				
Aug. 23, 1962	1305	80	15.8				
Nov. 9, 1962	1420	51	34.1				
Aug. 15, 1963	1200	80	46.2				
Oct. 2, 1963	1420	69	18.5				
Nov. 6, 1963	1545	59	27.7				
Oct. 20, 1964	1225	57	20.8				
Sept. 6, 1967	1050	69	23.7				
June 21, 1968	0830	70	69.6				
Oct. 21, 1968	1610	62	39.2				

MERAMEC RIVER BASIN

7-0145. Meramec River near Sullivan, Mo.

Location.--Lat 38°09'30", long 91°06'30", in SE¼NE¼ sec.35, T.40 N., R.2 W., on right bank at upstream side of Sappington Bridge, 3-3/4 miles downstream from Brazil Creek, 4 miles southeast of Sullivan, and at mile 113.2.

Drainage area.--1,475 sq mi.

Discharge records available.--September 1921 to September 1933, October 1943 to September 1969. Monthly discharge only for October 1943, published in WSP 1311.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 3, 1946	1135	69	474	Aug. 17, 1961	0600	79	386
Sept. 30, 1946	1005	70	304	Sept. 14, 1961	1320	70	471
Jan. 14, 1947	1430	49	949	Oct. 4, 1961	0955	58	404
Feb. 19, 1947	0830	36	498	Dec. 8, 1961	1200	42	545
Mar. 24, 1947	1310	50	706	Jan. 16, 1962	1135	35	4,010
Aug. 19, 1947	1100	88	351	Feb. 8, 1962	1050	41	898
Sept. 29, 1947	1010	64	335	Mar. 9, 1962	0700	36	1,320
Nov. 10, 1947	1320	50	631	Apr. 14, 1962	0910	50	2,240
Dec. 22, 1947	1000	44	204	July 19, 1962	1115	80	274
June 7, 1948	1430	74	604	Oct. 17, 1962	0855	65	335
Aug. 30, 1948	1430	79	350	Nov. 14, 1962	1400	50	302
Oct. 19, 1948	1115	56	385	Dec. 12, 1962	1545	32	279
Dec. 3, 1948	1305	46	347	Jan. 17, 1963	1225	33	371
May 18, 1949	1135	70	590	Feb. 14, 1963	0830	34	312
June 27, 1949	1250	77	959	Mar. 14, 1963	0905	47	688
July 28, 1949	1205	73	609	Apr. 10, 1963	0900	58	749
Aug. 16, 1949	1050	78	409	Apr. 25, 1963	1440	47	404
Aug. 3, 1950	1545	75	465	May 9, 1963	1740	74	644
Oct. 18, 1950	1255	65	455	June 11, 1963	1630	79	693
Nov. 29, 1950	1335	38	524	July 17, 1963	1335	80	264
Jan. 11, 1951	0940	34	605	Aug. 20, 1963	1525	70	355
Feb. 5, 1951	1330	33	586	Sept. 20, 1963	0820	70	221
July 10, 1952	1610	81	385	Oct. 23, 1963	1555	67	232
Aug. 27, 1952	1120	80	407	Nov. 19, 1963	1055	50	247
Oct. 1, 1952	1605	70	308	Dec. 13, 1963	1110	35	264
Dec. 19, 1952	1100	39	401	Feb. 12, 1964	1055	38	313
Feb. 4, 1953	1625	50	436	Mar. 10, 1964	1250	43	14,200
June 18, 1953	1640	84	340	May 27, 1964	1120	75	362
Sept. 25, 1953	1250	73	194	June 17, 1964	1550	74	870
Nov. 17, 1953	0735	46	268	July 16, 1964	1025	78	266
Jan. 6, 1954	1515	47	253	Aug. 20, 1964	1515	80	179
Feb. 11, 1954	1645	39	239	Sept. 15, 1964	0615	67	177
May 5, 1954	1025	62	471	Oct. 16, 1964	0930	58	203
July 28, 1954	1020	82	205	Nov. 23, 1964	1345	48	272
Sept. 2, 1954	0835	74	180	Dec. 17, 1964	0900	38	242
Oct. 13, 1954	0800	66	437	Jan. 13, 1965	1505	40	361
Nov. 23, 1954	1100	39	384	Mar. 17, 1965	1125	52	458
Jan. 7, 1955	1045	47	613	Apr. 22, 1965	1715	60	1,100
Feb. 16, 1955	0905	40	295	May 20, 1965	1015	70	292
May 11, 1955	1630	66	365	June 30, 1965	1305	79	408
July 27, 1955	1150	80	759	July 27, 1965	1150	74	212
Oct. 27, 1955	1645	58	215	Aug. 12, 1965	1620	80	187
Dec. 1, 1955	1045	38	257	Aug. 25, 1965	0810	76	223
Jan. 18, 1956	1340	32	216	Oct. 22, 1965	1025	57	278
Feb. 16, 1956	1700	34	565	Dec. 1, 1965	1400	43	260
July 12, 1956	1115	80	355	Dec. 29, 1965	1340	39	416
Sept. 13, 1956	1415	74	140	Jan. 21, 1966	1010	33	355
Oct. 11, 1956	1510	59	137	Mar. 10, 1966	0855	47	885
Nov. 7, 1956	1555	50	237	Apr. 6, 1966	1355	51	421
Dec. 14, 1956	0940	40	455	May 4, 1966	0720	60	1,730
Jan. 16, 1957	1000	34	176	June 8, 1966	1415	72	592
Nov. 13, 1958	1520	56	316	July 13, 1966	0900	85	242
Dec. 18, 1958	1535	39	442	Aug. 9, 1966	1005	78	299
June 19, 1959	1015	75	396	Aug. 25, 1966	1745	73	331
Aug. 19, 1959	1410	80	327	Sept. 13, 1966	0825	71	216
Nov. 17, 1959	0945	38	400	Sept. 29, 1966	1430	63	1,140
Jan. 22, 1960	1230	33	828	Oct. 20, 1966	1335	53	316
July 27, 1960	0610	80	320	Nov. 17, 1966	0910	50	394
Nov. 8, 1960	1450	48	298	Dec. 15, 1966	1110	41	604
Dec. 29, 1960	0735	33	402	Dec. 19, 1966	1045	44	440
Jan. 19, 1961	1005	40	336	Jan. 12, 1967	1545	38	345
Feb. 17, 1961	0850	50	857	Jan. 25, 1967	0930	54	295
Mar. 23, 1961	0800	50	1,720	Feb. 13, 1967	1040	43	678
May 10, 1961	0750	61	21,600	Mar. 2, 1967	0950	44	584
May 18, 1961	1405	62	3,380	Mar. 8, 1967	1140	41	2,700
July 19, 1961	1000	78	685	Apr. 6, 1967	1105	66	496

MERAMEC RIVER BASIN

Temperature and Discharge of Meramec River near Sullivan, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 12, 1967	0920	59	457				
May 11, 1967	1115	66	970				
May 25, 1967	0915	68	1,010				
June 8, 1967	0740	70	780				
June 28, 1967	1230	69	1,580				
July 7, 1967	--	69	612				
Aug. 9, 1967	1335	78	319				
Aug. 17, 1967	1245	75	252				
Sept. 14, 1967	1405	73	208				
Sept. 22, 1967	1215	67	2,730				
Oct. 16, 1967	1110	59	375				
Nov. 13, 1967	1715	50	500				
Dec. 12, 1967	1120	43	2,640				
Jan. 9, 1968	1000	33	746				
Feb. 7, 1968	1615	42	2,010				
Mar. 8, 1968	1750	50	520				
Apr. 8, 1968	1015	56	2,510				
May 6, 1968	1015	60	760				
June 17, 1968	0945	70	835				
July 8, 1968	1000	75	375				
July 30, 1968	1110	75	540				
Aug. 5, 1968	1000	78	432				
Sept. 17, 1968	1630	66	382				
Sept. 20, 1968	1000	65	608				
Oct. 29, 1968	0855	48	299				
Nov. 22, 1968	1625	48	1,050				
Dec. 12, 1968	1130	47	840				
Dec. 13, 1968	1710	43	730				
Jan. 24, 1969	1650	41	1,200				
Feb. 13, 1969	--	43	1,650				
Mar. 14, 1969	1640	44	1,110				
Apr. 11, 1969	1530	59	2,500				
May 1, 1969	1235	59	1,400				
May 13, 1969	0930	55	960				
June 20, 1969	1600	70	460				
June 23, 1969	1455	71	912				
July 30, 1969	--	77	370				
Aug. 15, 1969	1400	68	273				
Aug. 28, 1969	1445	77	270				
Sept. 29, 1969	1100	63	310				

MERAMEC RIVER BASIN

7-0150. Bourbeuse River near St. James, Mo.

Location.--Lat 38°02'00", long 91°38'45", in NW¼ sec.12, T.38 N., R.7 W., on left bank 650 feet upstream from new bridge on State Highway 68, 3 miles northwest of St. James, and at mile 138.8.

Drainage area.--21.3 sq mi.

Discharge records available.--November 1947 to September 1969.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 2, 1947	1025	40	2.30				
Dec. 26, 1947	1515	41	.65				
Jan. 20, 1948	1425	34	1.50				
Feb. 9, 1948	1255	34	1.20				
Mar. 2, 1948	0740	41	214				
Mar. 2, 1948	1100	43	136				
Nov. 2, 1948	0930	59	12.5				
May 23, 1949	1520	74	.56				
Aug. 15, 1949	0945	83	1.37				
Nov. 21, 1949	1345	43	1.52				
July 17, 1950	1525	77	.48				
Jan. 7, 1953	1350	34	1.30				
Mar. 2, 1953	0915	37	14.7				
June 18, 1953	1430	73	.17				
Oct. 13, 1960	1420	68	.02				
July 14, 1961	1010	67	7.80				
Sept. 30, 1961	1340	65	.19				
Feb. 14, 1963	1420	33	.22				
Oct. 18, 1963	1315	69	2.31				
Mar. 9, 1964	1700	39	294				
Mar. 10, 1964	1515	46	107				
Mar. 1[illegible], 1964	1040	39	59.7				
Mar. 19, 1964	0935	47	5.44				
June 30, 1964	1155	73	.42				
Mar. 9, 1965	1020	37	24.6				
Sept. 7, 1965	1145	73	8.91				
Apr. 9, 1966	1100	55	1.02				
July 23, 1966	0840	79	0				
Feb. 24, 1967	0850	37	1.28				
Mar. 28, 1967	1215	54	4.34				
June 6, 1967	1600	69	5.99				
July 19, 1967	1540	79	.23				
Dec. 8, 1967	1300	42	18.0				
Jan. 29, 1968	1400	51	37.0				
Mar. 26, 1968	1510	58	9.58				
June 19, 1968	0950	73	.69				
Sept. 12, 1968	1110	62	.01				
Oct. 18, 1968	1015	55	.82				
Dec. 19, 1968	1420	39	7.10				
Mar. 18, 1969	1535	52	3.97				
Apr. 29, 1969	1605	61	8.08				
June 17, 1969	1550	66	.60				
Aug. 21, 1969	1120	75	.26				

MERAMEC RIVER BASIN

7-0157.2 Bourbeuse River near High Gate, Mo.

Location.--Lat 38°08'50", long 91°34'50",in SE¼NE¼ sec.4, T.39 N., R.6 W., on downstream side of pier of bridge on County Highway B, 11 miles north of St. James, 5 miles east of High Gate, and 1.8 miles downstream from Lanes Fork.

Drainage area.--135 sq mi.

Discharge records available.--July 1965 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 23, 1962	1330	60	0.75				
Jan. 8, 1963	1015	35	14.3				
Apr. 30, 1963	1000	59	108				
July 24, 1963	1125	79	.38				
July 9, 1965	1805	75	850				
July 26, 1965	1130	79	2.97				
Oct. 5, 1965	1100	60	14.1				
Oct. 30, 1965	0945	52	5.82				
Jan. 4, 1966	1250	40	143				
Apr. 9, 1966	0930	51	11.4				
Apr. 23, 1966	1345	80	7,210				
May 14, 1966	0945	52	272				
May 18, 1966	0840	62	1,990				
June 18, 1966	1310	73	12.0				
July 23, 1966	1020	82	.17				
Sept. 3, 1966	0820	75	.16				
Jan. 28, 1967	0925	34	105				
Feb. 24, 1967	1225	34	9.70				
Mar. 28, 1967	0950	54	31.0				
June 6, 1967	1425	68	39.4				
July 19, 1967	1400	78	2.30				
Aug. 10, 1967	1400	77	1.87				
Aug. 24, 1967	1320	76	.28				
Oct. 10, 1967	1335	58	14.8				
Nov. 14, 1967	1420	48	32.6				
Jan. 29, 1968	1100	50	281				
Feb. 23, 1968	1455	36	16.8				
Mar. 27, 1968	1015	54	60.4				
June 19, 1968	1135	75	6.91				
July 16, 1968	1240	80	.29				
Aug. 29, 1968	1020	68	.20				
Oct. 16, 1968	1520	68	40.8				
Dec. 12, 1968	1415	44	34.4				
Mar. 18, 1969	0910	44	36.1				
Apr. 29, 1969	1440	61	64.5				
June 6, 1969	1605	80	7.24				
June 17, 1969	1405	67	17.8				
July 8, 1969	1530	80	27.4				
Aug. 20,11969	1620	81	.47				

MERAMEC RIVER BASIN

7-0157.5 Bourbeuse River near Owensville, Mo.

Location.--NE¼ sec.11, T.40 N., R.5 W., at bridge on State Highway 19, 9 miles southeast of Owensville, Gasconade County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 2, 1946	1450	63	1.88				
Sept. 12, 1948	1840	77	2.74				
Oct. 16, 1961	1510	58	5.91				
Nov. 9, 1962	0900	40	3.65				
Jan. 4, 1963	1635	37	15.9				
Apr. 30, 1963	1435	61	57.8				
July 24, 1963	1605	83	1.94				
Sept. 3, 1963	1245	74	1.36				
Oct. 2, 1963	1115	65	.05				
Nov. 4, 1963	1220	50	2.15				
Oct. 22, 1964	0750	47	.48				

MERAMEC RIVER BASIN

7-0160. Bourbeuse River near Spring Bluff, Mo.

Location.--Lat 38°18'40", long 91°16'45", in NE¼ sec.8, T.41 N., R.3 W., on downstream side of highway bridge, 1 mile downstream from Boone Creek, 3.5 miles northwest of Spring Bluff, 9.5 miles northwest of Sullivan, and at mile 75.3.

Drainage area.--608 sq mi.

Discharge records available.--November 1943 to September 1969 (discharge above 1,000 cfs only).

Maximum temperature measured.--71° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 28, 1953	1000	70	1.46				
Feb. 17, 1961	1415	43	266				
May 8, 1961	1115	62	20,600				
May 16, 1961	1125	63	288				
Nov. 9, 1962	1600	46	12.0				
Aug. 20, 1963	1020	71	13.4				
Oct. 2, 1963	0915	61	1.23				
Nov. 4, 1963	1045	51	7.79				
Oct. 21, 1964	1600	55	6.46				
Apr. 30, 1969	1010	59	249				

MERAMEC RIVER BASIN

7-0165. Bourbeuse River at Union, Mo.

Location.--Lat 38°26'45", long 90°59'30", in SE¼ sec.26, T.43 N., R.1 W., on right bank on downstream side of pier of bridge on U. S. Highway 50, 800 feet upstream from Flat Creek, half a mile east of Union, 7 miles upstream from Birch Creek, and at mile 13.4. Records include flow of Flat Creek.

Drainage area.--808 sq mi, includes that of Flat Creek.

Discharge records available.--June 1921 to September 1969. Gage-height records collected at same site since 1916 are contained in reports U. S. Weather Bureau.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 23, 1945	0845	75	37.1	Jan. 20, 1960	1445	36	633
July 16, 1946	1210	84	55.4	Apr. 28, 1960	0845	54	256
Aug. 20, 1946	1015	75	60.6	July 27, 1960	1300	81	101
Oct. 1, 1946	0620	61	29.0	Nov. 9, 1960	0755	47	40.1
Feb. 18, 1947	1200	35	119	Dec. 29, 1960	1125	33	94.9
Aug. 19, 1947	1430	87	42.5	Feb. 15, 1961	1105	35	1,190
Sept. 30, 1947	0830	65	33.2	Mar. 23, 1961	1315	50	1,490
Nov. 13, 1947	1000	44	455	May 11, 1961	1615	60	11,900
Dec. 1, 1947	0915	40	142	May 16, 1961	1300	61	589
Dec. 22, 1947	1315	39	86.7	June 16, 1961	1015	72	227
Feb. 3, 1948	0830	32	106	July 18, 1961	1035	80	98.3
Apr. 29, 1948	0800	64	223	Aug. 17, 1961	0845	78	92.4
June 8, 1948	1820	78	85.3	Oct. 4, 1961	1415	62	84.6
Oct. 19, 1948	1410	52	51.1	Nov. 8, 1961	0820	42	215
Dec. 3, 1948	1610	46	50.0	Dec. 8, 1961	1435	40	126
May 18, 1949	1420	73	118	Feb. 1, 1962	0855	33	910
June 28, 1949	1040	79	194	Feb. 8, 1962	1640	40	392
July 28, 1949	1540	76	206	Mar. 9, 1962	1130	40	360
May 9, 1950	0740	62	349	Apr. 14, 1962	1310	51	680
June 22, 1950	0840	76	513	May 16, 1962	1435	70	190
Aug. 3, 1950	1330	75	57.7	July 19, 1962	1350	85	45.0
Sept. 5, 1950	0900	68	653	Oct. 2, 1962	1620	65	50.8
Oct. 18, 1950	0935	62	91.9	Oct. 17, 1962	1140	62	62.2
Nov. 29, 1950	1040	33	120	Nov. 14, 1962	1025	40	38.9
May 2, 1951	1640	60	326	Dec. 13, 1962	1110	33	36.0
Aug. 1, 1951	1805	78	165	Jan. 17, 1963	0840	33	60.0
July 11, 1952	1130	88	50.5	Mar. 14, 1963	1400	48	454
Dec. 17, 1952	1615	40	56.2	Apr. 1, 1963	1445	58	5,150
Feb. 4, 1953	1345	47	151	Apr. 10, 1963	1325	58	233
June 19, 1953	0945	82	57.6	May 9, 1963	0855	72	198
Dec. 16, 1953	1620	50	22.8	May 31, 1963	0745	67	719
Jan. 6, 1954	1620	38	32.4	June 12, 1963	1525	83	110
Feb. 5, 1954	1345	38	46.2	July 17, 1963	1720	80	47.4
Feb. 11, 1954	1330	41	41.0	Aug. 6, 1963	----	84	26.0
Feb. 17, 1954	1510	50	42.0	Aug. 20, 1963	0755	70	39.6
Mar. 24, 1954	0920	48	36.9	Sept. 16, 1963	----	73	27.0
May 12, 1954	1345	63	130	Sept. 20, 1963	1250	76	22.4
Sept. 2, 1954	1130	78	21.6	Oct. 10, 1963	----	66	19.0
Oct. 11, 1954	1320	66	37.1	Oct. 24, 1963	1110	66	73.1
Oct. 13, 1954	1155	65	260	Nov. 13, 1963	----	46	33.0
Nov. 23, 1954	1345	47	162	Nov. 19, 1963	1245	50	28.7
Jan. 7, 1955	1220	48	262	Dec. 12, 1963	1040	34	38.7
Feb. 16, 1955	1140	38	64.7	Dec. 20, 1963	----	32	33.0
Apr. 6, 1955	1430	45	237	Jan. 21, 1964	----	32	31.0
May 17, 1955	0915	65	148	Feb. 11, 1964	----	37	51.0
June 22, 1955	1210	78	120	Feb. 12, 1964	1350	40	54.8
June 24, 1955	0705	78	92.5	Mar. 10, 1964	----	44	18,000
Oct. 28, 1955	1000	58	37.1	Mar. 11, 1964	0845	40	7,230
Dec. 1, 1955	1310	39	42.5	Mar. 17, 1964	0905	50	612
Feb. 17, 1956	0935	35	152	Mar. 31, 1964	1040	44	298
July 12, 1956	1330	82	115	Apr. 22, 1964	0700	63	702
Sept. 12, 1956	0945	75	18.1	May 20, 1964	1345	78	127
Oct. 10, 1956	1140	70	122	May 26, 1964	1315	78	87.9
Nov. 8, 1956	0940	49	20.8	June 10, 1964	1645	78	307
Dec. 17, 1956	1235	40	267	June 17, 1964	1020	74	692
Jan. 16, 1957	1245	33	76.7	July 7, 1964	0900	81	99.0
June 6, 1957	1230	79	315	July 17, 1964	1500	88	62.8
June 27, 1957	1130	59	336	Aug. 12, 1964	1045	77	37.0
July 25, 1957	1300	80	258	Aug. 27, 1964	0900	84	34.8
Dec. 10, 1957	1400	42	50.4	Sept. 10, 1964	----	77	31.0
Sept. 18, 1958	1440	70	102	Sept. 15, 1964	0850	69	28.4
Nov. 13, 1958	1250	56	35.9	Oct. 22, 1964	0855	62	23.0
Dec. 18, 1958	0940	35	67.6	Nov. 5, 1964	1610	57	30.0
Mar. 30, 1959	1250	50	331	Nov. 25, 1964	1100	43	44.9
Nov. 17, 1959	1300	38	113	Dec. 1, 1964	1330	38	72.0

MERAMEC RIVER BASIN

Temperature and Discharge of Bourbeuse River at Union, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 17, 1964	1515	35	43.7
Dec. 29, 1964	----	37	44.0
Jan. 13, 1965	1205	41	238
Jan. 27, 1965	1245	38	244
Feb. 19, 1965	0925	40	136
Mar. 18, 1965	1325	46	324
Apr. 12, 1965	1240	66	330
Apr. 14, 1965	0955	60	328
May 13, 1965	1615	78	72.0
May 21, 1965	0755	71	65.4
June 17, 1965	0700	72	176
July 1, 1965	1110	79	60.6
July 15, 1965	0645	76	244
July 29, 1965	1215	79	87.6
Aug. 11, 1965	1015	76	52.0
Aug. 26, 1965	1230	80	117
Sept. 8, 1965	1600	71	4,680
Sept. 28, 1965	1745	74	334
Oct. 6, 1965	1435	58	136
Oct. 22, 1965	1025	56	102
Nov. 4, 1965	1720	54	60.0
Dec. 2, 1965	1440	49	47.2
Dec. 9, 1965	1115	41	44.0
Dec. 29, 1965	0950	39	407
Jan. 13, 1966	0900	36	212
Jan. 20, 1966	1020	32	161
Feb. 11, 1966	1010	40	10,500
Feb. 17, 1966	1220	40	653
Mar. 11, 1966	0635	45	292
Mar. 16, 1966	1600	52	878
Apr. 7, 1966	1045	50	116
Apr. 22, 1966	0925	55	10,300
May 5, 1966	0715	62	586
May 26, 1966	0815	67	610
June 9, 1966	1430	73	134
June 30, 1966	0900	81	64.0
July 14, 1966	0915	85	37.7
July 28, 1966	0800	61	43.0
Aug. 5, 1966	0945	77	44.3
Aug. 25, 1966	1540	77	39.1
Sept. 14, 1966	1725	72	24.9
Sept. 29, 1966	0855	62	26.5
Oct. 20, 1966	0830	47	39.2
Nov. 17, 1966	1330	53	51.6
Dec. 15, 1966	0845	38	131
Dec. 21, 1966	1510	42	79.5
Jan. 13, 1967	0850	35	59.0
Jan. 26, 1967	1145	39	440
Feb. 14, 1967	0950	41	.52
Mar. 2, 1967	1620	46	77.9
Mar. 8, 1967	1420	40	729
Apr. 6, 1967	0845	62	123
Apr. 13, 1967	0720	60	110
May 11, 1967	0920	64	494
May 25, 1967	1440	73	273
June 8, 1967	1310	75	310
June 29, 1967	1255	71	4,600
July 7, 1967	1045	69	223
Aug. 11, 1967	0925	72	70.9
Aug. 17, 1967	0915	75	51.0
Sept. 14, 1967	0855	71	26.0
Sept. 22, 1967	1025	69	89.0
Oct. 16, 1967	1300	58	108
Nov. 8, 1967	1415	46	355
Nov. 10, 1967	1450	83	277
Dec. 15, 1967	1015	41	1,170
Jan. 9, 1968	1145	33	409
Feb. 7, 1968	1430	41	734
Mar. 8, 1968	1410	48	120
Apr. 8, 1968	1215	54	670
May 6, 1968	1200	64	162
May 7, 1968	1310	46	120
Apr. 29, 1968	1450	65	279
May 13, 1968	1840	65	124
June 17, 1968	1120	76	136
July 8, 1968	1140	78	62.0
July 30, 1968	0915	75	89.3
Aug. 5, 1968	1135	82	84.0
Sept. 17, 1968	1125	68	76.9
Sept. 20, 1968	1210	68	81.0
Oct. 28, 1968	1435	50	88.1
Nov. 22, 1968	1415	44	560
Dec. 11, 1968	1315	39	320
Dec. 13, 1968	1500	39	250
Jan. 24, 1969	1500	39	4,100
Feb. 13, 1969	1400	39	730
Mar. 14, 1969	1510	41	516
Mar. 20, 1969	1250	50	283
Apr. 11, 1969	1400	60	840
Apr. 30, 1969	1645	61	376
May 13, 1969	1230	59	295
June 20, 1969	1230	69	390
June 26, 1969	1120	74	681
July 30, 1969	1530	77	200
Aug. 18, 1969	1605	83	60.5
Aug. 28, 1969	0830	74	100
Sept. 29, 1969	1345	66	110

MERAMEC RIVER BASIN

7-0170. Meramec River at Robertsville, Mo.

Location.--Lat 38°25'40", long 90°49'35", in SW¼NW¼ sec.32, T.43 N., R.2 E., Franklin County, at county highway bridge, 1 mile northwest of Robertsville, and 1-3/4 miles upstream from Calvey Creek.

Drainage area.--2,673 sq mi.

Discharge records available.--October 1939 to September 1951 (discontinued). Discharge measurements only October 1951 to September 1969.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date8	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 17, 1946	1210	84	428				
Aug. 29, 1946	1515	71	639				
Oct. 2, 1946	0720	62	396				
Feb. 18, 1947	0835	37	800				
Aug. 21, 1947	0630	83	453				
Oct. 2, 1947	1145	63	390				
Dec. 23, 1947	1000	36	515				
Feb. 3, 1948	1200	33	712				
June 8, 1948	1435	77	729				
Sept. 1, 1948	0730	73	462				
Oct. 20, 1948	1335	57	532				
Dec. 4, 1948	1615	46	469				
May 19, 1949	1050	70	926				
Aug. 20, 1949	1840	79	593				
Nov. 22, 1949	1045	46	838				
Aug. 3, 1950	0900	75	577				
Oct. 17, 1950	1625	67	622				
Jan. 10, 1951	1220	36	781				
Nov. 10, 1960	1310	45	379				
Jan. 20, 1961	1420	35	439				

MERAMEC RIVER BASIN

7-0172. Big River at Irondale, Mo.

Location.--Lat 37°49'48", long 90°41'27", in SE¼SW¼ sec.15, T.36 N., R.3 E., on right bank 50 ft upstream from bridge on County Highway U, 0.2 mile upstream from Mill Creek, and 0.8 mile west of Irondale.

Drainage area.--175 sq mi.

Discharge records available.--July 1965 to September 1969

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 28, 1965	1410	82	6.89				
Sept. 2, 1965	1005	70	37.6				
Sept. 11, 1965	1000	70	28.8				
Sept. 12, 1965	0725	57	35.2				
Oct. 1, 1965	1145	66	43.9				
Oct. 20, 1965	0910	63	18.0				
Nov. 30, 1965	1110	39	17.1				
Dec. 27, 1965	1445	39	67.3				
Jan. 19, 1966	1140	33	36.0				
Feb. 15, 1966	1040	36	217				
Mar. 7, 1966	1110	41	149				
Apr. 8, 1966	1330	54	33.0				
May 3, 1966	0825	56	182				
June 7, 1966	0935	70	32.6				
July 11, 1966	1120	86	7.07				
Aug. 10, 1966	1005	76	26.8				
Sept. 9, 1966	0730	67	8.23				
Oct. 18, 1966	1100	53	17.0				
Nov. 14, 1966	0930	46	62.3				
Dec. 20, 1956	0830	43	55.8				
Jan. 23, 1967	1135	50	35.8				
Mar. 1, 1967	0950	37	151				
Apr. 10, 1967	1145	62	53.3				
May 24, 1967	0925	64	62.6				
June 26, 1967	1155	75	19.2				
Aug. 8, 1967	1045	80	7.32				
Sept. 22, 1967	1110	67	201				
May 16, 1968	1010	66	46.8				
July 11, 1968	1525	77	15.3				
Sept. 12, 1968	1125	64	11.6				
Dec. 13, 1968	0910	43	84.6				
Mar. 26, 1969	1345	41	406				
May 1, 1969	1740	64	149				
June 4, 1969	1825	72	23.5				
July 11, 1969	1040	81	23.2				

MERAMEC RIVER BASIN

7-0175. Dry Branch near Bonne Terre, Mo.

Location.--Lat 37°55'55", long 90°27'40", at west-central edge of Survey 3062, T.37 N., R.5 E., on downstream side of highway bridge, 0.5 mile upstream from Terre Bleue Creek and 4.5 miles east of Bonne Terre.

Drainage area.--3.65 sq mi.

Discharge records available.--September 1955 to September 1959 (discontinued). Discharge measurements and gage-height record available October 1959 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 2, 1956	1550	49	0.50				
May 1, 1956	0805	50	2.08				
May 15, 1956	1520	59	25.7				
Dec. 11, 1958	1300	38	1.13				
Dec. 4, 1959	1130	46	.32				
Feb. 1, 1960	1035	40	1.77				
Mar. 4, 1960	1210	32	1.05				
June 1, 1960	1300	76	.61				
Feb. 8, 1961	1200	33	.31				
Mar. 1, 1961	1455	52	1.71				
May 4, 1961	0745	62	1.06				
June 7, 1961	1400	78	1.21				
July 13, 1961	1040	83	.13				
Nov. 8, 1961	0915	33	0				
Jan. 5, 1962	0930	45	1.06				
Mar. 7, 1962	1350	33	2.88				
May 3, 1962	0800	70	2.04				
June 8, 1962	1155	70	.21				
Sept. 7, 1962	0840	70	.01				
Oct. 5, 1962	0945	66	.46				
Oct. 31, 1962	1005	50	.52				
Dec. 7, 1962	1415	34	.09				
Jan. 9, 1963	1650	48	1.64				
Mar. 7, 1963	1200	46	2.79				
Apr. 4, 1963	1210	50	2.14				
June 5, 1963	1430	68	.03				
Aug. 15, 1963	0845	70	.10				
Dec. 5, 1963	1130	33	.01				
Feb. 13, 1964	0845	38	1.69				
Mar. 5, 1964	1305	45	.82				
Apr. 3, 1964	0920	60	.84				
May 14, 1964	0805	58	.32				
July 9, 1964	0955	80	0				
Sept. 4, 1964	1045	83	.01				
Dec. 3, 1964	1415	35	.01				
Jan. 21, 1965	1000	39	.11				
Mar. 11, 1965	1140	43	2.38				
Apr. 29, 1965	1145	66	.31				
June 9, 1965	1510	84	.20				
Dec. 1, 1965	0910	34	.03				
Apr. 13, 1966	1340	48	4.38				
Oct. 11, 1966	1545	60	0				
Dec. 30, 1966	1405	40	.72				
Apr. 26, 1967	1425	54	7.95				
June 14, 1967	0925	79	.10				
July 18, 1967	1500	87	.01				
Aug. 24, 1967	0800	67	.02				
Sept. 19, 1967	1240	85	.05				
Dec. 28, 1967	1450	35	2.39				
Apr. 3, 1968	1010	54	12.0				
Apr. 9, 1968	1650	64	2.31				
June 6, 1968	1550	83	.56				
July 11, 1968	1015	80	.01				
Dec. 6 1968	1450	41	1.28				
Jan. 24, 1969	1520	37	4.05				
Mar. 20, 1969	1530	57	.67				
June 4, 1969	1300	68	.13				
July 11, 1969	0825	71	.37				

MERAMEC RIVER BASIN

7-0176. Big River near Bonne Terre, Mo.

Location.--NE¼ sec.2, T.37 N., R.4 E., at bridge on U. S. Highway 67, 2 miles north of Bonne Terre, St. Francois County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--79° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 10, 1946	0730	54	161				
Sept. 24, 1953	1345	62	18.9				
Sept. 22, 1961	1120	70	35.3				
Aug. 23, 1962	1455	79	39.0				
Nov. 8, 1962	1645	48	83.8				
Aug. 16, 1963	0955	71	89.3				
Oct. 2, 1963	0820	59	20.8				
Nov. 8, 1963	0835	50	43.0				
Sept. 10, 1964	1600	78	47.6				
Oct. 21, 1964	0945	49	32.9				
Sept. 1, 1967	1120	64	29.5				
Sept. 6, 1967	1320	71	35.6				

MERAMEC RIVER BASIN

7-0178. Mineral Fork near Potosi, Mo.

Location.--SW¼ Survey 2066, T.39 N., R.3 E., at bridge on State Highway 47, 3 miles west of Washington State Park and 8½ miles north of Potosi, Washington County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 21, 1961	1640	72	28.4				
May 16, 1962	1245	76	80.5				
June 20, 1962	0840	53	51.2				
Aug. 24, 1962	0930	77	25.6				
Nov. 15, 1962	0950	50	40.6				
Aug. 15, 1963	1440	80	39.1				
Oct. 1, 1963	1305	63	23.0				
Nov. 7, 1963	0930	55	31.3				
Sept. 10, 1964	1010	73	20.4				
Oct. 20, 1964	1505	55	29.9				
Sept. 1, 1967	1355	68	26.3				
Oct. 22, 1968	1100	57	33.7				

MERAMEC RIVER BASIN

7-0179. Old Mines Creek near Potosi, Mo.

Location.--NE¼ Survey 3039, T.39 N., R.3 E., at bridge on State Highway 47, 0.1 mile northwest of State Highway 21 and 7 miles north of Potosi, Washington County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 21, 1961	1450	75	2.60				
May 16, 1962	1040	77	5.60				
June 20, 1962	1050	59	6.10				
Aug. 23, 1962	1725	82	1.57				
Nov. 8, 1962	1400	48	3.53				
Aug. 15, 1963	1350	80	2.23				
Oct. 1, 1963	1440	73	3.10				
Nov. 7, 1963	0830	58	2.40				
Sept. 10, 1964	0910	71	1.40				
Oct. 20, 1964	1410	51	1.50				
Sept. 1, 1967	1300	71	2.60				
Oct. 22, 1968	0935	56	2.04				

MERAMEC RIVER BASIN

7-0180. Big River near DeSoto, Mo.

Location.--Lat 38°07'20", long 90°40'30", in SW¼NW¼ sec.11, T.39 N., R.3 E., near right bank on downstream side of pier of Mammoth Bridge, 300 ft upstream from Mammoth Creek, 1½ miles downstream from Mineral Fork, 6½ miles west of DeSoto, and at mile 59.2. Records include flow of Mammoth Creek.

Drainage area.--718 sq mi, includes that of Mammoth Creek.

Discharge records available.--October 1948 to September 1969. Prior to May 1949 monthly discharge only, published in WSP 1311.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
June 29, 1949	1220	79	305	Jan. 10, 1962	1100	32	271
July 30, 1949	1105	70	230	Feb. 1, 1962	1300	34	70.8
May 8, 1950	1035	63	507	Feb. 7, 1962	1215	35	369
June 21, 1950	1035	75	323	Mar. 8, 1962	0725	33	572
Aug. 2, 1950	1115	74	153	Apr. 11, 1962	0950	50	2,260
Oct. 19, 1950	0955	63	228	May 15, 1962	1040	73	283
Nov. 30, 1950	0935	38	310	Oct. 16, 1962	0930	69	229
Mar. 27, 1951	1000	45	623	Nov. 15, 1962	1125	51	155
Apr. 30, 1951	0735	72	504	Dec. 11, 1962	1450	33	138
July 30, 1951	1145	76	401	Jan. 18, 1963	1125	33	213
July 10, 1952	0950	70	115	Feb. 13, 1963	0950	33	149
Oct. 1, 1952	1000	65	103	Mar. 13, 1963	1000	48	487
Dec. 19, 1952	1015	43	228	Apr. 9, 1963	1100	59	421
Feb. 5, 1953	1615	47	291	May 10, 1963	0905	74	258
June 18, 1953	0840	81	135	June 10, 1963	1500	84	233
Dec. 17, 1953	1425	49	98.0	July 16, 1963	0910	79	156
Jan. 6, 1954	0840	38	97.7	Aug. 21, 1963	1040	73	136
Feb. 12, 1954	1540	39	82.9	Sept. 19, 1963	1020	70	85.0
Mar. 23, 1954	1000	40	133	Oct. 23, 1963	1015	63	72.0
May 5, 1954	1750	65	248	Nov. 18, 1963	0935	56	91.3
July 27, 1954	0850	79	60.6	Dec. 11, 1963	1530	37	119
Sept. 1, 1954	0830	75	89.4	Jan. 8, 1964	0830	35	113
Oct. 2, 1954	0930	64	289	Feb. 11, 1964	1035	34	188
Nov. 22, 1954	1035	39	168	Mar. 9, 1964	1040	41	10,500
Jan. 6, 1955	1055	50	324	Mar. 18, 1964	1130	51	557
Feb. 15, 1955	1100	37	177	May 21, 1964	0900	73	159
Apr. 5, 1955	0910	50	375	June 16, 1964	0740	70	211
May 11, 1955	0925	64	181	July 15, 1964	0835	74	94.2
June 22, 1955	0900	70	130	Aug. 19, 1964	1055	74	66.6
June 23, 1955	1615	78	114	Sept. 14, 1964	0735	63	70.2
July 26, 1955	1000	78	315	Oct. 15, 1964	1015	58	80.7
Sept. 23, 1955	1520	70	127	Oct. 20, 1964	1500	57	100
Oct. 27, 1955	1005	59	60.1	Nov. 6, 1964	1215	56	102
Nov. 30, 1955	1230	38	97.0	Nov. 19, 1964	1125	46	114
Feb. 16, 1956	0935	34	579	Nov. 30, 1964	1530	38	139
Mar. 16, 1956	0840	36	239	Dec. 31, 1964	0850	41	110
Apr. 11, 1956	1035	41	270	Jan. 13, 1965	1005	39	202
Apr. 15, 1956	1245	80	75.3	Jan. 27, 1965	1845	39	173
July 11, 1956	1145	75	92.8	Feb. 18, 1965	1010	40	262
Sept. 13, 1956	0815	74	34.8	Feb. 19, 1965	1530	44	243
Oct. 11, 1956	0800	58	40.2	Mar. 15, 1965	1115	45	356
Nov. 7, 1956	0955	50	102	Mar. 18, 1965	1500	46	291
Dec. 13, 1956	1000	38	251	Apr. 14, 1965	1530	54	450
Jan. 15, 1957	1115	33	94.6	Apr. 21, 1965	1150	63	476
Jan. 26, 1957	1120	59	334	May 13, 1965	----	69	148
July 18, 1957	1000	81	311	May 18, 1965	0945	72	138
Nov. 12, 1958	0945	53	131	June 17, 1965	1330	72	126
Dec. 19, 1958	1210	36	254	June 28, 1965	1155	80	95.8
June 18, 1959	0920	82	218	July 15, 1965	0930	77	82.0
Jan. 21, 1960	1055	33	484	July 28, 1965	0905	76	93.2
Feb. 23, 1960	0900	34	328	Aug. 12, 1965	1115	74	64.0
Apr. 27, 1960	0930	50	528	Aug. 23, 1965	0725	75	104
June 1, 1960	1010	70	421	Sept. 7, 1965	1200	72	415
July 26, 1960	1745	78	172	Oct. 6, 1965	1045	58	153
Oct. 5, 1960	0925	66	95.2	Oct. 7, 1965	1030	59	148a
Nov. 8, 1960	1755	52	135	Oct. 20, 1965	0610	62	112
Dec. 28, 1960	1540	30	239	Nov. 5, 1965	1200	55	114a
Jan. 19, 1961	1430	40	190	Nov. 29, 1965	1205	44	172
Feb. 16, 1961	1015	44	604	Dec. 9, 1965	----	45	126a
Mar. 8, 1961	0915	50	4,680	Dec. 28, 1965	1000	34	252
Mar. 9, 1961	1315	46	2,600	Jan. 13, 1966	1530	41	258a
Mar. 22, 1961	1640	49	1,730	Jan. 19, 1966	0650	33	142
May 8, 1961	1055	52	14,800	Feb. 17, 1966	1515	43	818a
May 13, 1961	1150	72	568	Mar. 7, 1966	0640	37	648
Aug. 16, 1961	0610	80	206	Mar. 17, 1966	1400	56	542a
Sept. 13, 1961	0820	77	110	Apr. 4, 1966	1340	53	193
Oct. 3, 1961	0950	56	137	Apr. 21, 1966	1300	58	4,970a

MERAMEC RIVER BASIN

Temperature and Discharge of Big River near DeSoto, Mo.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 2, 1966	0705	55	996				
May 26, 1966	1430	70	510a				
June 30, 1966	1445	82	127a				
July 11, 1966	0750	80	97.3				
July 28, 1966	1545	81	81.0a				
Aug. 10, 1966	1305	75	132				
Aug. 26, 1966	1010	71	129				
Sept. 8, 1966	0800	67	75.0				
Sept. 30, 1966	1120	59	114				
Oct. 21, 1966	1140	52	111				
Nov. 18, 1966	1045	51	165				
Dec. 16, 1966	1115	40	283				
Dec. 20, 1966	1445	43	196				
Jan. 13, 1967	1100	36	164				
Jan. 23, 1967	0850	43	172				
Feb. 13, 1967	1600	45	315				
Feb. 28, 1967	1145	36	914				
Mar. 9, 1967	1150	42	1,550				
Apr. 5, 1967	1400	68	230				
Apr. 10, 1967	0845	58	239				
May 10, 1967	1330	61	443				
May 23, 1967	1120	65	417				
June 9, 1967	0740	73	252				
June 26, 1967	0830	68	262				
July 6, 1967	1730	71	194				
Aug. 7, 1967	1145	76	144				
Aug. 11, 1967	1615	74	161				
Sept. 21, 1967	1630	71	2,120				
Oct. 16, 1967	1500	59	201				
Nov. 17, 1967	1300	48	210				
Dec. 14, 1967	1650	41	3,730				
Jan. 9, 1968	1345	36	447				
Feb. 7, 1968	1210	41	1,000				
Mar. 8, 1968	1230	47	335				
Apr. 8, 1968	1430	57	1,150				
May 6, 1968	1400	64	339				
May 16, 1968	1650	72	430				
June 17, 1968	1315	75	287				
July 8, 1968	1350	75	126				
July 12, 1968	1230	75	165				
Aug. 5, 1968	1340	80	156				
Sept. 19, 1968	1720	65	496				
Oct. 4, 1968	1500	62	103				
Oct. 18, 1968	1145	57	89				
Nov. 22, 1968	1130	44	362				
Dec. 13, 1968	1220	42	300				
Jan. 24, 1969	1200	40	1,240				
Feb. 14, 1969	1230	40	650				
Mar. 14, 1969	1215	42	530				
Mar. 19, 1969	1500	49	414				
Apr. 11, 1969	1130	57	1,610				
Apr. 24, 1969	1200	56	700				
May 12, 1969	1230	57	392				
June 5, 1969	1500	70	198				
June 25, 1969	1600	78	650				
July 11, 1969	1555	79	321				
July 30, 1969	1130	72	480				
Aug. 28, 1969	1100	72	175				

a Mean daily discharge

MERAMEC RIVER BASIN

7-0181. Big River near Richwoods, Mo.

Location.--W½ Sec.33, T.40 N., R.3 E., at bridge on County Highway H, 1½ mile east of Fletcher and 7 miles east of Richwoods, Jefferson County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--79° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 10, 1946	1135	53	315				
Oct. 19, 1950	1140	64	233				
Sept. 22, 1961	0630	70	94.2				
May 16, 1962	0745	74	253				
Nov. 29, 1962	0935	45	148				
Nov. 8, 1962	1210	48	166				
Mar. 15, 1963	1200	46	429				
May 16, 1963	0840	71	251				
Aug. 15, 1963	1610	76	285				
Oct. 1, 1963	1130	62	74.2				
Nov. 7, 1963	0625	58	101				
Sept. 10, 1964	1145	79	65.3				
Oct. 20, 1964	1615	55	72.5				
Oct. 22, 1968	1250	59	103				

MERAMEC RIVER BASIN

7-0185. Big River at Byrnesville, Mo.

Location.--Lat 38°21'45", long 90°39'06", in SE¼ sec.12, T.42 N., R.3 E., on right bank on downstream side of pier of highway bridge at Byrnesville, 4 miles upstream from Heads Creek, and at mile 14.1.

Drainage area.--917 sq mi.

Discharge records available.--October 1921 to September 1969. Prior to June 1922 monthly discharge only, published in WSP 1311.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 18, 1946	1040	84	130	May 8, 1961	1530	50	21,700
Aug. 26, 1946	1725	74	197	May 11, 1961	1430	60	4,300
Oct. 4, 1946	0950	61	109	May 19, 1961	1515	62	2,380
Feb. 17, 1947	0920	36	373	June 20, 1961	1520	81	329
Mar. 26, 1947	1330	45	375	Aug. 18, 1961	0955	80	200
Aug. 21, 1947	1530	87	152	Oct. 5, 1961	1430	63	163
Oct. 4, 1947	1330	66	108	Sept. 20, 1961	1500	70	126
Dec. 23, 1947	1045	47	197	Nov. 9, 1961	1300	44	248
Feb. 3, 1948	1630	33	256	Dec. 8, 1961	1125	42	370
Apr. 30, 1948	1205	66	327	Jan. 16, 1962	1200	34	6,010
June 8, 1948	1140	74	345	Feb. 9, 1962	1435	40	662
Aug. 31, 1948	1045	79	133	Mar. 10, 1962	1405	40	1,820
Dec. 4, 1948	1025	42	184	Apr. 13, 1962	1315	50	1,930
May 19, 1949	1255	70	316	May 17, 1962	1425	78	335
July 29, 1949	1225	73	252	July 18, 1962	1210	83	108
Aug. 18, 1949	1430	84	276	Oct. 18, 1962	0815	65	254
Nov. 21, 1949	1200	46	285	Nov. 15, 1962	1330	49	166
Oct. 17, 1950	1245	65	278	Dec. 13, 1962	1440	33	133
Nov. 28, 1950	1035	35	421	Jan. 16, 1963	1225	33	249
Jan. 10, 1951	0915	35	487	Feb. 12, 1963	1250	32	198
July 30, 1951	1650	78	552	Mar. 15, 1963	1020	47	511
July 11, 1952	1550	87	161	Apr. 1, 1963	1045	58	6,630
Oct. 2, 1952	1045	70	112	Apr. 11, 1963	1000	53	481
Nov. 13, 1952	1500	46	173	May 8, 1963	1145	70	364
Dec. 19, 1952	1300	43	232	July 19, 1963	1005	82	150
Feb. 13, 1953	1130	39	326	Aug. 19, 1963	1100	69	432
June 17, 1953	1505	75	207	Sept. 19, 1963	1245	75	96.0
Nov. 16, 1953	1250	45	99.2	Nov. 20, 1963	1005	53	99.2
Jan. 5, 1954	1515	34	132	Dec. 13, 1963	1010	34	133
Feb. 11, 1954	0940	41	104	Jan. 8, 1964	1330	34	127
Mar. 25, 1954	0925	42	152	Feb. 24, 1964	0945	36	373
May 4, 1954	1500	66	283	Mar. 11, 1964	1400	40	17,000
July 27, 1954	1315	82	83.7	Mar. 18, 1964	0635	50	1,050
Sept. 3, 1954	0945	79	98.8	May 27, 1964	1655	74	178
Nov. 24, 1954	1035	42	165	June 1, 1964	1100	68	370
Jan. 5, 1955	0910	47	434	June 18, 1964	0655	80	250
Feb. 16, 1965	1505	37	205	July 14, 1964	1250	75	129
May 12, 1955	1620	62	242	July 24, 1964	0920	85	105
June 22, 1955	1500	78	183	Aug. 18, 1964	1520	76	71.6
Sept. 23, 1955	1520	77	86.4	Sept. 16, 1964	1000	70	73.6
Sept. 29, 1955	1405	74	99.7	Oct. 23, 1964	1235	53	85.4
Oct. 28, 1955	1235	58	71.1	Nov. 18, 1964	1545	52	119
Dec. 2, 1955	1245	40	114	Dec. 18, 1964	1415	34	106
Jan. 17, 1956	1430	31	86.3	Feb. 19, 1965	1425	44	286
June 11, 1956	1520	79	145	Mar. 19, 1965	1410	42	317
Aug. 15, 1956	1020	80	103	Apr. 21, 1965	1340	59	891
Sept. 12, 1956	1355	74	44.2	May 20, 1965	1110	72	147
Oct. 12, 1956	0810	58	38.1	July 1, 1965	1505	78	106
Nov. 8, 1956	1340	49	121	July 28, 1965	1705	79	82.7
Dec. 14, 1956	1300	40	280	Aug. 27, 1965	1115	77	113
Jan. 16, 1957	1515	32	107	Oct. 6, 1965	1500	61	196
June 26, 1957	1555	59	416	Oct. 21, 1965	1225	64	146
Dec. 12, 1957	1500	34	195	Dec. 3, 1965	1055	42	125
Jan. 17, 1958	1030	43	295	Dec. 28, 1965	1330	40	356
Feb. 17, 1958	1430	53	386	Jan. 20, 1966	1400	33	215
Nov. 12, 1958	1340	54	166	Mar. 10, 1966	0500	51	1,060
Dec. 19, 1958	0845	36	355	May 5, 1966	1055	64	835
Aug. 20, 1959	0710	82	294	June 14, 1966	1210	75	264
Nov. 17, 1959	1420	38	340	July 15, 1966	1020	86	99.3
Feb. 24, 1960	1405	34	390	Aug 4, 1966	1320	79	142
July 28, 1960	1300	82	171	Sept. 15, 1966	0915	70	89.8
Nov. 9, 1960	1100	46	165	Oct. 17, 1966	1240	57	94.9
Dec. 9, 1960	0530	41	923	Oct. 20, 1966	1250	56	124
Dec. 30, 1960	1120	33	244	Nov. 18, 1956	0940	49	188
Jan. 20, 1961	1735	34	214	Dec. 21, 1966	0935	41	246
Feb. 15, 1961	1745	42	1,220	Jan. 27, 1967	1225	60	4,330
Mar. 9, 1961	1130	50	4,880	Feb. 27, 1967	1405	34	261
Mar. 24, 1961	1110	48	1,830	Apr. 14, 1967	1040	62	329

MERAMEC RIVER BASIN

Temperature and Discharge of Big River at Byrnesville, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
June 30, 1967	0845	72	345				
Aug. 4, 1967	0930	83	165				
Sept. 13, 1967	1110	71	95.5				
Nov. 6, 1967	0945	45	275				
July 31, 1968	0925	78	282				
May 23, 1968	1115	57	905				
Sept. 18, 1968	1505	20	178				
Oct. 29, 1968	1640	50	119				
Mar. 18, 1969	1405	48	546				

MERAMEC RIVER BASIN

7-0190. Meramec River near Eureka, Mo.

Location.--Lat 38°30'20", long 90°35'30", in SE¼ sec.32, T.44 N., R.4 E., on right bank 44 ft upstream from downstream bridge on dual U. S. Highway 66, 2 miles east of Eureka, 3 miles downstream from Big River, and at mile 34.6.

Drainage area.--3,788 sq mi.

Discharge records available.--August 1903 to July 1906, October 1921 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 22, 1945	1610	78	741
July 17, 1946	0935	82	575
Aug. 28, 1946	1145	73	1,040
Oct. 2, 1946	1210	62	524
Feb. 17, 1947	1410	38	1,290
Oct. 4, 1947	0945	66	556
Dec. 24, 1947	1610	36	779
June 7, 1948	1910	77	1,180
Oct. 19, 1948	1735	55	698
Dec. 4, 1948	1345	46	724
Aug. 19, 1949	1045	81	884
July 31, 1950	0650	71	817
Oct. 17, 1950	0900	64	976
Nov. 30, 1950	1320	39	1,230
July 11, 1952	0905	80	663
Sept. 30, 1952	1325	72	541
Dec. 17, 1952	1250	39	860
Feb. 4, 1953	1030	40	867
June 17, 1953	1130	87	777
Nov. 16, 1953	1000	45	444
Jan. 5, 1954	1225	34	457
Feb. 10, 1954	1550	45	466
Mar. 24, 1954	1245	44	476
Apr. 2, 1954	0810	46	608
May 4, 1954	0955	69	748
May 12, 1954	0840	62	801
July 27, 1954	1535	84	347
Sept. 3, 1954	1345	82	330
Oct. 11, 1954	1045	70	362
Nov. 24, 1954	1345	41	896
Feb. 17, 1955	0830	37	658
May 12, 1955	1325	62	910
June 24, 1955	0745	79	733
July 25, 1955	1015	85	1,180
Oct. 25, 1955	1420	49	447
Dec. 2, 1955	1020	40	487
Jan. 24, 1956	1530	34	370
Oct. 10, 1956	1015	66	223
Nov. 8, 1956	1200	48	375
Jan. 17, 1957	0945	31	422
Dec. 10, 1957	1200	44	708
Jan. 17, 1958	1320	45	980
Nov. 13, 1958	1010	53	572
Dec. 30, 1958	1035	38	805
Aug. 18, 1959	0615	80	534
Jan. 20, 1960	1030	34	3,190
July 28, 1960	0550	80	680
Nov. 10, 1960	0655	45	556
Dec. 9, 1960	1225	41	3,300
Dec. 30, 1960	0705	33	826
Jan. 20, 1961	1045	35	677
Mar. 24, 1961	0645	49	5,980
May 19, 1961	0705	62	12,200
July 18, 1961	1530	80	1,200
Aug. 18, 1961	0625	80	868
Oct. 5, 1961	1120	62	764
Dec. 8, 1961	1030	38	1,100
Feb. 13, 1962	1755	32	691
Mar. 10, 1962	1100	36	4,740
Apr. 13, 1962	0920	50	6,820
June 22, 1962	1030	51	929
July 18, 1962	0925	80	548
Oct. 17, 1962	1540	68	828
Nov. 15, 1962	1030	49	592
Dec. 14, 1962	0855	32	476
Jan. 16, 1963	0915	33	738
Feb. 12, 1963	1205	32	630
Feb. 13, 1963	1755	32	692
May. 8, 1963	0740	70	1,860
July 1, 1963	0840	83	788
July 19, 1963	0740	82	767
Aug. 19, 1963	0750	70	779
Sept. 18, 1963	0710	74	460
Sept. 19, 1963	1015	74	392
Oct. 22, 1963	1240	68	434
Nov. 19, 1963	1430	50	435
Dec. 13, 1963	1310	34	533
Jan. 8, 1964	1105	32	461
Feb. 13, 1964	1030	38	1,010
Mar. 12, 1964	0825	38	27,400
Mar. 17, 1964	1220	51	4,260
Mar. 20, 1964	0855	47	3,190
June 18, 1964	0920	80	2,070
July 14, 1964	0930	75	618
July 24, 1964	0640	85	436
Aug. 18, 1964	1105	77	335
Sept. 16, 1964	0620	71	322
Oct. 23, 1964	0905	53	343
Nov. 18, 1964	1235	51	491
Dec. 18, 1964	1125	32	446
Jan. 12, 1965	0900	52	887
Feb. 20, 1965	0525	41	888
Mar. 19, 1965	0930	41	1,140
Apr. 22, 1965	1020	58	2,450
May 20, 1965	0745	72	640
July 2, 1965	1120	81	738
July 29, 1965	0940	77	472
Aug. 27, 1965	0835	78	503
Oct. 1, 1965	1000	60	923
Oct. 21, 1965	1000	61	610
Dec. 3, 1965	0650	42	492
Dec. 28, 1965	1630	39	1,500
Jan. 20, 1966	1100	33	976
Mar. 16, 1966	0940	53	4,880
Apr. 7, 1966	1330	52	949
May 6, 1966	0640	65	3,390
June 14, 1966	0915	75	1,030
July 15, 1966	0720	87	398
Aug. 4, 1966	1010	78	552
Aug. 19, 1966	1120	80	1,400
Sept. 15, 1966	0510	71	474
Oct. 17, 1966	1010	54	475
Nov. 18, 1966	0550	50	647
Nov. 23, 1966	0630	50	634
Jan. 27, 1967	0650	38	4,680
Feb. 27, 1967	1100	34	850
Apr. 14, 1967	1650	61	1,300
May 22, 1967	1120	64	3,200
June 30, 1967	1250	72	6,520
Aug. 4, 1967	1335	84	857
Aug. 24, 1967	1145	76	547
Aug. 30, 1967	0940	74	439
Sept. 13, 1967	0835	72	386
Oct. 31, 1967	0930	54	927
May 22, 1968	1120	56	1,530
July 29, 1968	1400	81	1,690
Sept. 17, 1968	1030	69	584
Oct. 28, 1968	1100	52	560
May 6, 1969	1115	66	2,350
June 24, 1969	1315	70	10,200
Aug. 18, 1969	1200	78	648

ROCK CREEK BASIN

7-0190.3 Rock Creek below Seckman, Mo.

Location.--Lat 38°23'27", long 90°25'14", in NW¼ Survey 783, T.42 N., R.5 E., on downstream side of left wingwall of bridge on county road, 1 mile southeast of Seckman, Jefferson County, and 3 miles northeast of Antonia.

Drainage area.--14.7 sq mi.

Discharge records available.--Discharge measurements and gage-height record available from October 1965 to September 1969.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp (°F)	Discharge (cfs)	Date	time	Water Temp. (°F)	Discharge (cfs)
Dec. 3, 1965	1050	52	1.17				
Jan. 19, 1966	1710	40	3.41				
Feb. 8, 1966	1230	35	61.6				
Mar. 24, 1966	1330	50	5.49				
Apr. 12, 1966	0930	46	80.4				
Apr. 22, 1966	0705	50	44.9				
May 16, 1966	1250	71	9.42				
July 29, 1966	1150	76	.63				
Aug. 26, 1966	1240	77	.75				
Sept. 23, 1966	1035	67	.49				
Oct. 14, 1966	0655	61	.54				
Nov. 10, 1966	1130	53	3.70				
Dec. 8, 1966	1105	56	16.0				
Jan. 6, 1967	1120	46	1.31				
Feb. 15, 1967	0840	48	3.48				
Mar. 24, 1967	1520	63	10.4				
Apr. 28, 1967	1425	66	11.5				
May 18, 1967	0945	61	15.4				
June 15, 1967	1020	70	3.46				
July 26, 1967	0840	70	2.71				
Aug. 31, 1967	1040	66	.96				
Sept. 28, 1967	1110	59	1.63				
Dec. 14, 1967	1545	44	41.8				
Jan. 25, 1968	1530	42	8.08				
Mar. 1, 1968	1500	48	4.65				
Apr. 11, 1968	1015	57	12.6				
June 7, 1968	1500	75	.80				
July 31, 1968	1025	68	1.60				
Sept. 27, 1968	1530	68	2.38				
Oct. 30, 1968	0840	51	1.04				
Dec. 19, 1968	1320	46	4.61				
Feb. 20, 1969	1220	42	9.82				
Mar. 20, 1969	1230	53	8.68				
Apr. 23, 1969	1205	53	21.4				
June 27, 1969	1435	75	15.7				
Aug. 14, 1969	0910	68	2.46				

MERAMEC RIVER BASIN

7-0190.45 Meramec River at Paulina Hills, Mo.

Location.--Lat 38°27'46", long 90°24'53", Jefferson County, at bridge on State Highway 21 at Paulina Hills, 0.3 mile downstream from Saline Creek, and 10 miles urstream from mouth.

Drainage area.--3,950 sq mi, approximately.

Discharge records available.--Mean discharge calculated from flow at gaging station at Eureka, Mo.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 6, 1963	----	88	446
Sept. 16, 1963	----	80	386
Oct. 10, 1963	----	72	292
Nov. 14, 1963	----	48	459
Dec. 20, 1963	----	32	470
Jan. 21, 1964	----	34	498
Feb. 12, 1964	----	37	659
Mar. 10, 1964	----	43	15,900
Apr. 1, 1964	----	46	1,760
Apr. 22, 1964	----	65	3,810
May 20, 1964	----	80	1,000
June 11, 1964	----	77	1,140
July 6, 1964	----	84	602
Aug. 12, 1964	----	84	338
Sept. 10, 1964	----	79	345
Oct. 20, 1964	1600	60	330
Nov. 6, 1964	1045	57	422
Nov. 30, 1964	1645	42	624
Dec. 30, 1964	----	37	475
Jan. 27, 1965	1700	40	702
Feb. 19, 1965	1235	42	948
Mar. 18, 1965	1230	47	1,280
Apr. 14, 1965	1340	58	2,660
May 14, 1965	0800	73	803
June 17, 1965	1015	78	1,105
July 15, 1965	0805	81	891
Aug. 12, 1965	0900	78	382
Sept. 7, 1965	1315	74	7,780
Oct. 7, 1965	0830	63	912
Nov. 5, 1965	----	54	525
Dec. 9, 1965	1150	43	417
Jan. 14, 1966	0900	38	1,390
Feb. 18, 1966	0900	42	4,200
Mar. 17, 1966	1200	54	3,900
Apr. 21, 1966	0930	57	14,100
May 26, 1966	1035	69	3,300
June 30, 1966	1140	84	657
July 29, 1966	1230	83	424
Aug. 26, 1966	1345	80	651
Sept. 30, 1966	1330	62	521
Oct. 21, 1966	1440	57	556
Nov. 18, 1966	1425	49	243
Dec. 16, 1966	1400	41	1,380
Jan. 13, 1967	1350	37	657
Feb. 13, 1967	1315	43	1,820
Mar. 9, 1967	0945	39	6,350
Apr. 5, 1967	1110	67	1,410
May 10, 1967	1040	61	3,270
June 8, 1967	1600	76	2,180
July 6, 1967	1545	75	1,350
Aug. 16, 1967	1740	78	412
Sept. 21, 1967	1445	75	880
Oct. 16, 1967	1640	59	738
Nov. 10, 1967	1045	78	1,260
Dec. 14, 1967	0930	42	10,100
Jan. 9, 1968	1540	33	1,640
Feb. 7, 1968	0950	41	6,180
Mar. 8, 1968	1000	44	1,140
Apr. 8, 1968	1630	54	6,680
May 6, 1968	1550	66	1,680
June 17, 1968	1500	78	1,740
July 8, 1968	1545	80	848
Aug. 5, 1968	1530	86	1,030
Sept. 19, 1968	1530	66	872
Nov. 22, 1968	0930	43	2,870
Dec. 13, 1968	1030	39	1,670
Jan. 24, 1969	1000	39	8,200
Feb. 14, 1969	0840	41	3,350
Mar. 14, 1969	1000	41	2,650
Apr. 11, 1969	0930	59	5,850
May 12, 1969	1530	62	1,840
June 25, 1969	1745	75	4,400
July 30, 1969	1345	78	1,300
Aug. 27, 1969	1415	78	520
Sept. 30, 1969	0845	67	720

JOACHIM CREEK BASIN

7-0190.5 Joachim Creek at Hematite, Mo.

Location.--Lat 38°12'05", long 90°28'32", in S½ of Survey 423, T.40 N., R.5E., at bridge on county road, ½ mile east of Hematite, Jefferson County.

Drainage area.--95.0 sq mi.

Discharge records available.--Discharge measurements and gage-height record available from October 1965 to September 1969.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 22, 1961	0850	70	3.40				
May 16, 1962	1645	72	21.8				
June 19, 1962	0730	54	14.2				
Aug. 22, 1962	1145	82	1.88				
Nov. 8, 1962	0945	48	9.81				
Aug. 16, 1963	1235	75	6.40				
Oct. 1, 1963	0900	59	2.46				
Nov. 8, 1963	1100	52	4.90				
Sept. 10, 1964	1420	79	3.62				
Oct. 21, 1964	1115	53	4.04				
Dec. 2, 1965	1055	40	5.12				
Jan. 19, 1966	1045	33	13.6				
Mar. 22, 1966	1415	63	31.6				
Apr. 20, 1966	0955	59	2,850				
May 19, 1966	1415	64	169				
July 27, 1966	0820	80	4.13				
Aug. 25, 1966	0615	70	5.64				
Sept. 21, 1966	1040	65	5.73				
Oct. 12, 1966	0925	62	5.14				
Nov. 9, 1966	1015	62	7.01				
Dec. 7, 1966	1445	55	13.5				
Jan. 6, 1967	0830	36	8.79				
Feb. 16, 1967	0525	39	20.6				
Mar. 24, 1967	1310	57	51.3				
Apr. 28, 1967	1055	56	115				
May 18, 1967	0645	59	73.3				
June 14, 1967	0930	75	22.6				
July 28, 1967	0935	76	20.8				
Aug. 30, 1967	1410	72	4.91				
Sept. 14, 1967	1405	73	5.07				
Sept. 26, 1967	0945	65	7.47				
Nov. 17, 1967	1500	59	11.5				
Apr. 10, 1968	1415	61	72.7				
June 7, 1968	1210	78	25.6				
July 31, 1968	1310	78	10.0				
Oct. 30, 1968	1050	53	8.47				
Dec. 19, 1968	0940	41	25.9				
Feb. 14, 1969	1450	39	54.7				
Mar. 20, 1969	0910	52	35.9				
Apr. 25, 1969	1010	55	55.2				
June 6, 1969	0945	53	12.8				
July 18, 1969	1010	84	22.4				
Aug. 14, 1969	1215	77	9.16				

SANDY CREEK BASIN

7-0190.7 Sandy Creek near Pevely, Mo.

Location.--Lat 38°16'39", long 90°25'22, in west ½ Survey 421, T.41 N., R.5 E., at downstream left abutment of bridge on County Highway Z, 1 mile west of Pevely.

Drainage area.--32.5 sq mi.

Discharge records available.--January 1966 to May 1968 (discontinued).

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 19, 1966	1505	33	5.64				
Feb. 10, 1966	0825	43	280				
Mar. 24, 1966	1100	41	8.15				
Apr. 22, 1966	1120	58	61.2				
May 17, 1966	1315	76	14.9				
July 28, 1966	1210	84	.12				
Sept. 21, 1966	1305	69	0				
Nov. 8, 1966	1400	62	.68				
Dec. 7, 1966	1340	60	1.33				
Jan. 6, 1967	1300	33	1.27				
Feb. 15, 1967	1740	43	3.28				
Mar. 24, 1967	1030	57	13.2				
Apr. 27, 1967	1445	60	29.5				
May 19, 1967	0750	63	15.0				
June 14, 1967	1110	79	2.06				
July 26, 1967	1215	79	.66				
Aug. 29, 1967	1425	70	.61				
Sept. 27, 1967	1040	59	1.77				
Mar. 14, 1968	1400	46	12.9				
Apr. 10, 1968	1655	63	27.9				

PLATTIN CREEK BASIN

7-0190.9 Plattin Creek at Plattin, Mo.

Location.--Lat 38°07'45", long 90°24'33", in NE¼ Survey 857, T.39 N., R.6 E., on downstream left pier one fourth mile southeast of Plattin, and 4 miles southeast of Selma.

Drainage area.--65.8 sq mi.

Discharge records available.--December 1965 to September 1969.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 19, 1966	1350	34	13.4				
Feb. 9, 1966	1400	42	155				
Mar. 23, 1966	1350	54	21.2				
Apr. 12, 1966	1240	47	517				
Apr. 21, 1966	1000	54	332				
May 19, 1966	1040	62	148				
July 27, 1966	1020	78	5.09				
Aug. 26, 1966	0655	67	8.58				
Sept. 20, 1966	1455	65	4.89				
Oct. 13, 1966	0920	65	5.03				
Nov. 9, 1966	1525	66	5.25				
Dec. 7, 1966	1155	58	12.7				
Jan. 6, 1967	1455	33	9.44				
Feb. 16, 1967	0935	40	15.3				
Mar. 23, 1967	1235	57	34.5				
Apr. 27, 1967	1140	57	147				
May 19, 1967	1024	64	46.3				
June 13, 1967	1500	74	18.1				
July 27, 1967	1250	75	7.29				
Aug. 29, 1967	1215	79	6.05				
Sept. 26, 1967	1350	75	10.6				
Nov. 7, 1967	1450	53	12.0				
Jan. 4, 1968	1650	38	22.1				
Apr. 10, 1968	1045	57	56.4				
June 5, 1968	1110	69	24.0				
July 15, 1968	0935	72	8.63				
Sept. 26, 1968	1530	69	5.42				
Oct. 30, 1968	1345	57	5.45				
Dec. 18, 1968	1500	46	15.8				
Feb. 13, 1969	1000	36	36.6				
Mar. 20, 1969	1150	50	23.0				
Apr. 24, 1969	1715	60	43.0				
June 2, 1969	1155	63	17.2				

MISSISSIPPI RIVER MAIN STEM

7-0205. Mississippi River at Chester, Ill.

Location.--Lat 37°54'10", long 89°51'10", in SW¼ sec.24, T.7 S., R.7 W., 3rd principal meridian, on downstream side of left pier of main truss of highway bridge at Chester, 8.1 miles downstream from Kaskaskia River, and at mile 109.9 above Ohio River.

Drainage area.--712,600 sq mi, approximately.

Discharge records available.--Discharge: October 1927 to September 1968 in reports of Geological Survey. Monthly discharge only for some periods, published in WSP 1311. Since August 1873, results of discharge measurements in reports of Mississippi River Commission.

Gage heights: July 1942 to September 1968 in reports of Geological Survey. Since May 1891, in reports of Mississippi River Commission and U. S. Weather Bureau.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 27, 1952	0940	52	71,400	May 15, 1962	0920	69	251,000
Nov. 4, 1952	1100	57	72,100	May 21, 1962	1125	77	211,000
Nov. 12, 1952	1630	53	70,500	June 5, 1962	0810	73	326,000
May 24, 1960	1540	67	365,000	June 18, 1962	1445	77	296,000
June 28, 1960	1415	77	279,000	June 25, 1962	0900	80	195,000
July 19, 1960	1145	80	170,000	July 10, 1962	0830	83	177,000
Aug. 16, 1960	1220	82	102,000	July 16, 1962	1050	61	171,000
Aug. 23, 1960	1230	83	121,000	July 24, 1962	1425	81	196,000
Sept. 6, 1960	1025	84	149,000	Aug. 7, 1962	1450	82	157,000
Sept. 14, 1960	1015	77	105,000	Aug. 14, 1962	1525	80	119,000
Oct. 31, 1960	0700	56	83,300	Aug. 28, 1962	0925	82	99,600
Nov. 21, 1960	0820	49	117,000	Sept. 5, 1962	1000	78	131,000
Dec. 13, 1960	1020	38	86,300	Sept. 11, 1962	0915	72	167,000
Dec. 20, 1960	0745	35	73,600	Sept. 24, 1962	1040	70	130,000
Feb. 1, 1961	1245	35	49,900	Oct. 23, 1962	1050	64	143,000
Feb. 6, 1961	0800	33	46,400	Oct. 29, 1962	1120	50	111,000
Feb. 27, 1961	0900	38	146,000	Nov. 6, 1962	1015	48	97,300
Mar. 6, 1961	0815	51	141,000	Nov. 20, 1962	0910	48	98,100
Mar. 27, 1961	0730	54	276,000	Nov. 27, 1962	1425	42	88,200
Apr. 17, 1961	0550	48	325,000	Dec. 27, 1962	1010	33	61,900
May 2, 1961	0545	65	263,000	Feb. 13, 1963	0705	33	74,200
May 10, 1961	0915	52	647,000	Feb. 25, 1963	1050	35	77,600
May 15, 1961	0640	65	560,000	Mar. 12, 1963	1015	43	241,000
May 23, 1961	1305	58	328,000	Apr. 2, 1963	0835	56	242,000
June 5, 1961	1030	74	206,000	Apr. 24, 1963	1005	64	127,000
June 12, 1961	0615	80	189,000	Apr. 29, 1963	1040	48	117,000
June 19, 1961	1415	74	223,000	May 7, 1963	1010	59	184,000
June 26, 1961	1230	76	125,000	May 21, 1963	0825	68	267,000
July 7, 1961	0810	82	119,000	May 27, 1963	1430	67	185,000
July 11, 1961	1400	80	150,000	June 4, 1963	1015	67	142,000
July 18, 1961	0800	82	94,000	June 10, 1963	1340	66	134,000
July 25, 1961	1000	68	223,000	June 18, 1963	0905	80	133,000
Aug. 1, 1961	1155	82	185,000	June 25, 1963	1115	81	126,000
Aug. 16, 1961	0920	80	138,000	July 2, 1963	0915	85	132,000
Aug. 22, 1961	1315	78	85,000	July 9, 1963	1040	79	101,000
Aug. 29, 1961	0820	82	91,800	July 16, 1963	0815	82	96,500
Sept. 5, 1961	1000	83	99,900	Sept. 4, 1963	0905	79	84,100
Sept. 11, 1961	1140	81	121,000	Sept. 24, 1963	0915	73	75,400
Sept. 18, 1961	0930	79	454,000	Oct. 22, 1963	0910	70	65,700
Sept. 25, 1961	1350	77	281,000	Nov. 5, 1963	1610	56	67,100
Oct. 3, 1961	1205	62	214,000	Nov. 13, 1963	0945	50	68,000
Oct. 10, 1961	1305	65	174,000	Nov. 26, 1963	1030	53	82,600
Oct. 16, 1961	1030	65	258,000	Jan. 7, 1964	1115	36	45,400
Oct. 24, 1961	1205	60	145,000	Feb. 18, 1964	1035	40	50,000
Oct. 30, 1961	1015	59	115,000	Feb. 25, 1964	1440	40	49,800
Nov. 6, 1961	1015	54	399,000	Mar. 3, 1964	1045	43	48,000
Nov. 14, 1961	0915	50	219,000	Mar. 11, 1964	0930	36	111,000
Nov. 20, 1961	1615	45	407,000	Mar. 17, 1964	1410	48	90,100
Nov. 28, 1961	1030	43	262,000	Mar. 24, 1964	0630	47	77,400
Dec. 14, 1961	1300	40	111,000	Apr. 20, 1964	1020	49	144,000
Dec. 20, 1961	1500	35	115,000	May 19, 1964	0900	78	166,000
Dec. 27, 1961	1050	34	139,000	May 26, 1964	0855	77	153,000
Jan. 3, 1962	1425	35	107,000	June 2, 1964	0950	70	196,000
Jan. 25, 1962	1410	33	120,000	June 23, 1964	0900	81	265,000
Jan. 30, 1962	1020	34	172,000	July 7, 1964	0920	82	127,000
Feb. 11, 1962	1705	37	284,000	July 14, 1964	1100	80	124,000
Feb. 19, 1962	1105	38	297,000	July 21, 1964	0915	85	102,000
Mar. 5, 1962	1050	33	167,000	July 28, 1964	0920	85	91,300
Mar. 12, 1962	0920	37	174,000	Aug. 4, 1964	1415	91	71,800
Mar. 20, 1962	1030	40	263,000	Aug. 25, 1964	1000	74	69,100
Mar. 26, 1962	1115	44	633,000	Sept. 2, 1964	0945	82	66,000
Mar. 28, 1962	1300	45	602,000	Sept. 14, 1964	0930	74	140,000
Apr. 10, 1962	1100	47	464,000	Sept. 22, 1964	0920	69	111,000
Apr. 17, 1962	0920	48	395,000	Sept. 29, 1964	0945	68	124,000
May 1, 1962	1100	64	316,000	Oct. 7, 1964	0930	64	90,600

Temperature and Discharge of Mississippi River at Chester, Ill.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 13, 1964	0840	60	73,000
Oct. 27, 1964	1100	58	66,200
Nov. 12, 1964	1100	60	73,500
Nov. 17, 1964	1055	51	93,200
Nov. 24, 1964	1005	44	97,500
Dec. 1, 1964	1450	38	79,800
Dec. 8, 1964	1125	37	57,200
Dec. 15, 1964	1530	37	66,800
Dec. 23, 1964	1405	36	67,600
Dec. 29, 1964	1420	36	53,300
Jan. 5, 1965	1435	37	170,000
Jan. 12, 1965	1015	39	100,000
Jan. 19, 1965	1550	35	63,900
Jan. 26, 1965	1500	35	209,000
Feb. 3, 1965	1050	33	82,300
Feb. 11, 1965	1250	39	132,000
Feb. 16, 1965	0910	35	186,000
Mar. 2, 1965	1340	37	107,000
Mar. 9, 1965	1435	35	245,000
Mar. 16, 1965	1440	40	259,000
Mar. 23, 1965	1035	40	370,000
Mar. 30, 1965	1430	39	155,000
Apr. 7, 1965	1510	50	410,000
Apr. 27, 1965	0930	57	406,000
May 4, 1965	1515	60	423,000
May 11, 1965	1520	66	401,000
May 24, 1965	0945	74	249,000
June 17, 1965	1405	75	265,000
July 12, 1965	0840	82	199,000
July 21, 1965	0840	82	168,000
July 26, 1965	0830	82	287,000
Aug. 17, 1965	1215	86	93,000
Aug. 25, 1965	1320	81	93,200
Aug. 30, 1965	0815	77	122,000
Sept. 13, 1965	1500	74	250,000
Sept. 20, 1965	0700	73	274,000
Oct. 4, 1965	1400	62	314,000
Oct. 28, 1965	1100	65	170,000
Nov. 8, 1965	1430	57	139,000
Nov. 22, 1965	0845	49	140,000
Nov. 29, 1965	1440	45	125,000
Dec. 14, 1965	1430	41	124,000
Dec. 27, 1965	1415	38	197,000
Jan. 3, 1966	1115	42	210,000
Jan. 10, 1966	0930	37	164,000
Jan. 24, 1966	0830	33	136,000
Feb. 15, 1966	1025	33	353,000
Feb. 28, 1966	0845	35	184,000
Mar. 14, 1966	0805	40	185,000
Mar. 21, 1966	1405	51	192,000
Mar. 28, 1966	0830	48	227,000
Apr. 4, 1966	1430	48	236,000
Apr. 18, 1966	1340	51	234,000
May 2, 1966	1355	59	267,000
May 16, 1966	0730	59	272,000
May 31, 1966	0835	71	251,000
June 8, 1966	0735	74	174,000
June 27, 1966	0750	81	146,000
July 5, 1966	1540	85	160,000
July 18, 1966	0920	88	129,000
Aug. 1, 1966	0710	82	117,000
Aug. 9, 1966	0655	82	89,100
Aug. 15, 1966	1300	79	91,500
Aug. 22 1966	0725	81	113,000
Sept. 6, 1966	1140	80	98,100
Sept. 12, 1966	1315	76	77,300
Sept. 26, 1966	0655	67	75,600
Oct. 10, 1966	1420	64	69,500
Oct. 19, 1966	0740	58	95,900
Oct. 31, 1966	0745	54	72,800
Nov. 7, 1966	1430	50	77,600
Nov. 21, 1966	1305	47	81,500
Dec. 19, 1966	1430	40	106,000
Dec. 28, 1966	1345	36	81,200
Jan. 9, 1967	1315	33	70,400
Jan. 23, 1967	1325	41	61,100
Jan. 30, 1967	1435	39	91,900
Feb. 9, 1967	1400	37	103,000
Feb. 22, 1967	1415	35	106,000
Mar. 6, 1967	1140	36	84,500
Mar. 14, 1967	1320	41	114,000
Mar. 20, 1967	1110	41	116,000
Mar. 27, 1967	1420	50	164,000
Apr. 3, 1967	1140	57	233,000
Apr. 10, 1967	1440	59	274,000
Apr. 17, 1967	1455	61	371,000
Apr. 24, 1967	1400	58	321,000
May 1, 1967	1240	54	290,000
May 8, 1967	1245	60	239,000
May 15, 1967	1045	58	233,000
May 24, 1967	1120	67	173,000
June 5, 1967	1320	68	233,000
June 12, 1967	1310	70	233,000
June 19, 1967	1455	79	445,000
June 26, 1967	1505	80	509,000
July 6, 1967	1245	77	445,000
July 10, 1967	1145	79	289,000
July 17, 1967	1245	77	188,000
July 24, 1967	1220	82	136,000
July 31, 1967	1345	82	195,000
Aug. 17, 1967	1245	80	100,000
Aug. 22, 1967	1435	78	107,000
Aug. 30, 1967	1130	79	84,600
Sept. 7, 1967	1240	74	82,000
Sept. 11, 1967	1135	75	77,200
Sept. 18, 1967	1110	74	108,000
Sept. 25, 1967	1140	72	111,000
Oct. 5, 1967	1240	71	83,000
Oct. 9, 1967	1130	66	102,000
Oct. 25, 1967	1210	58	109,000
Oct. 30, 1967	1520	53	115,000
Nov. 6, 1967	1545	47	320,000
Nov. 13, 1967	1325	48	159,000
Nov. 21, 1967	1445	48	121,000
Nov. 28, 1967	1430	43	116,000
Dec. 6, 1967	1445	41	146,000
Dec. 19, 1967	1300	40	161,000
Dec. 26, 1967	1715	37	229,000
Jan. 23, 1968	1320	35	104,000
Jan. 29, 1968	1415	37	132,000
Feb. 6, 1968	1345	42	286,000
Feb. 12, 1968	1345	35	175,000
Feb. 19, 1968	1505	35	141,000
Feb. 26, 1968	1515	34	116,000
Mar. 4, 1968	1345	40	98,700
Mar. 11, 1968	1445	42	92,000
Mar. 18, 1968	1430	46	138,000
Mar. 25, 1968	1400	45	160,000
Apr. 1, 1968	1510	55	140,000
Apr. 8, 1968	1125	53	193,000
Apr. 15, 1968	1535	59	142,000
Apr. 22, 1968	1100	62	187,000
Apr. 30, 1968	1510	59	221,000
May 7, 1968	1230	63	157,000
May 13, 1968	1240	62	140,000
May 21, 1968	1330	66	147,000
May 27, 1968	1520	60	381,000
June 5, 1968	1620	70	257,000
June 12, 1968	1400	80	169,000
June 19, 1968	1320	78	165,000
July 8, 1968	1400	80	237,000
July 15, 1968	1255	79	226,000
July 24, 1968	1410	87	182,000
July 30, 1968	1725	83	239,000
Aug. 6, 1968	1620	82	256,000
Aug. 30, 1968	1145	68	114,000
Sept. 3, 1968	1450	76	89,700
Sept. 10, 1968	1745	72	100,000
Sept. 19, 1968	1600	70	114,000
Sept. 26, 1968	1215	72	156,000
Oct. 2, 1968	1125	73	130,000
Oct. 10, 1968	1420	44	123,000
Oct. 15, 1968	1655	62	165,000
Oct. 28, 1968	1410	64	170,000
Nov. 8, 1968	1430	50	186,000
Nov. 26, 1968	1415	44	148,000
Dec. 5, 1968	1435	49	193,000
Dec. 10, 1968	1425	49	144,000
Dec. 17, 1968	1215	49	91,700
Dec. 26, 1968	1500	33	105,000

MISSISSIPPI RIVER MAIN STEM

Temperature and Discharge of Mississippi River at Chester, Ill.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Jan. 2, 1969	1525	32	203,000				
Jan. 16, 1969	1015	40	96,600				
Feb. 7, 1969	1400	38	241,000				
Feb. 18, 1969	1430	36	201,000				
Feb. 24, 1969	1320	37	175,000				
Mar. 12, 1969	1135	36	205,000				
Apr. 9, 1969	0915	50	442,000				
Apr. 22, 1969	1045	56	540,000				
May 6, 1969	1010	60	451,000				
May 19, 1969	1115	62	305,000				
June 2, 1969	1420	66	269,000				
June 25, 1969	1200	74	366,000				
July 9, 1969	1400	79	573,000				
July 16, 1969	1110	87	632,000				
Aug. 21, 1969	0950	80	182,000				
Aug. 26, 1969	1125	80	151,000				
Sept. 24, 1969	1235	66	144,000				

APPLE CREEK BASIN

7-0206. Apple Creek at Appleton, Mo.

Location.--NE¼ sec.4, T.33 N., R.12 E., at bridge on U. S. Highway 61, at Appleton, Cape Girardeau - Perry County lines.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 23, 1961	0830	71	11.7				
May 18, 1962	0615	71	30.0				
June 19, 1962	1055	55	15.1				
Aug. 22, 1962	1340	78	10.3				
Nov. 9, 1962	0745	47	13.2				
Aug. 15, 1963	1155	75	13.8				
Oct. 3, 1963	1450	75	9.92				
Nov. 6, 1963	1345	55	12.6				
Sept. 9, 1964	1550	74	9.93				
Oct. 23, 1964	1150	54	9.98				
Sept. 6, 1967	1400	66	10.3				
Oct. 22, 1968	1715	57	12.6				

HEADWATER DIVERSION CHANNEL BASIN

7-0210. Castor River at Zalma, Mo.

Location.--Lat 37°08'45", long 90°04'30", in SE¼ sec.29, T.29 N., R.9 E., on downstream side of left bridge pier on State Highway 51 in Zalma, 2½ miles downstream from Perkins Creek.

Drainage area.--423 sq mi.

Discharge records available.--January 1920 to September 1969.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 11, 1945	1155	64	218
June 28, 1946	1450	78	129
Aug. 8, 1946	1000	76	311
Nov. 15, 1946	1015	52	380
Jan. 24, 1947	1100	39	294
Mar. 3, 1947	0910	39	124
May 10, 1947	0925	62	312
June 20, 1947	0815	73	99.9
Aug. 1, 1947	1300	80	75.8
Sept. 5, 1947	0800	73	49.0
Oct. 12, 1947	1400	66	56.5
Dec. 1, 1947	0935	41	232
May 21, 1948	0920	68	435
June 23, 1948	1150	78	104
Aug. 6, 1948	1150	80	83.8
Apr. 21, 1949	0800	55	246
June 8, 1949	0720	74	296
Aug. 23, 1949	0705	72	63.4
Oct. 2, 1949	0850	61	87.1
Nov. 11, 1949	0930	43	161
Oct. 14, 1950	1730	62	102
Nov. 17, 1950	1215	50	136
May 10, 1951	1300	67	249
June 29, 1951	1000	63	184
Aug. 9, 1951	1450	79	119
July 16, 1952	0845	70	96.0
Aug. 27, 1952	1420	76	55.1
Jan. 14, 1953	0940	42	197
Apr. 7, 1953	1530	53	327
July 8, 1953	1025	74	54.1
Aug. 12, 1953	1335	77	35.4
Sept. 23, 1953	1435	67	28.0
Nov. 12, 1953	1035	44	63.9
Jan. 27, 1954	1515	45	180
May 15, 1954	1230	66	210
Feb. 14, 1961	1330	46	468
Apr. 25, 1961	1220	64	459
June 21, 1961	1725	69	336
Aug. 30, 1961	1715	70	59.5
Oct. 31, 1961	1535	61	63.0
Aug. 21, 1962	1305	77	54.2
Nov. 2, 1962	0735	53	103
Feb. 12, 1963	1555	38	110
Aug. 7, 1963	1410	80	60.8
Sept. 9, 1963	1730	75	75.1
Oct. 15, 1963	1615	65	47.8
Nov. 19, 1963	1230	52	69.5
Dec. 18, 1963	1110	33	112
Jan. 29, 1964	1310	38	214
Mar. 3, 1964	1455	49	198
June 19, 1964	1630	75	76.4
July 28, 1964	1600	79	48.0
Sept. 2, 1964	1730	77	60.0
Oct. 6, 1964	1600	58	67.8
Nov. 3, 1964	1430	57	59.9
Dec. 15, 1964	1620	42	264
Jan. 14, 1965	1410	41	316
Feb. 12, 1965	1030	33	2,660
Mar. 23, 1965	1310	48	225
Apr. 29, 1965	1550	59	264
June 3, 1965	1530	72	163
July 8, 1965	1040	74	188
Aug. 4, 1965	1600	79	62.2
Sept. 2, 1965	1615	71	76.7
Oct. 7, 1965	0955	58	223
Nov. 8, 1965	1200	60	85.9
Dec. 15, 1965	1305	47	251
Jan. 17, 1966	1255	40	238
Nov. 22, 1966	1435	58	343
May 2, 1966	1650	58	1,180
June 9, 1966	1220	74	169
July 13, 1966	1240	83	52.0
Aug. 18, 1966	1145	79	115
Sept. 21, 1966	1205	63	136
Oct. 26, 1966	1120	52	108
Nov. 30, 1966	1125	45	336
Jan. 11, 1967	1215	36	272
Feb. 10, 1967	1010	39	460
Mar. 23, 1967	1200	54	315
Apr. 26, 1967	1250	57	156
May 31, 1967	1420	67	154
Aug. 31, 1967	1340	71	45.9
Oct. 11, 1967	1135	57	71.6
Jan. 24, 1968	0910	40	189
Mar. 18, 1968	1635	51	422
July 10, 1968	1305	75	64.8
Aug. 19, 1968	1630	80	77.6
Sept. 11, 1968	1515	68	46.6
Oct. 17, 1968	0820	66	53.9
Dec. 12, 1968	0950	39	226
Mar. 12, 1969	1250	39	249
May 21, 1969	1110	68	904
July 23, 1969	1220	45	106
Sept. 24, 1969	1210	64	60.8

HEADWATER DIVERSION CHANNEL BASIN

7-0214. Whitewater River at Millersville, Mo.

Location.--On line between sec.23 and 26, T.32 N., R.11 E., at bridge on State Highway 72 at Millersville, Cape Girardeau County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 22, 1961	1600	72	17.4				
Aug. 22, 1962	1530	78	15.6				
Nov. 9, 1962	0920	45	23.3				
Aug. 15, 1963	1405	73	18.2				
Oct. 3, 1963	1330	74	14.5				
Nov. 6, 1963	1600	56	17.6				
Sept. 11, 1964	1435	71	13.9				
Oct. 23, 1964	1105	52	16.0				
Sept. 5, 1967	1445	68	11.2				
Oct. 22, 1968	0800	57	20.6				

HEADWATER DIVERSION CHANNEL BASIN

7-0218. Headwater Diversion Channel at Allenville, Mo.

Location.--Lat 37°12'58", long 89°46'00", in N½ sec.6, T.29 N., R.12 E., at county road bridge, ½ mile southwest of Allenville, 2 miles downstream from Whitewater River, and 15½ miles above mouth.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements and gage-height record available from May 1951 to September 1969.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 15, 1953	0740	78	81.5				
Aug. 13, 1953	0735	78	68.4				
Sept. 23, 1953	1630	69	49.7				
Nov. 12, 1953	1330	47	88.5				
Dec. 16, 1953	1420	41	114				
Jan. 28, 1954	0830	45	386				
Nov. 1, 1962	1410	55	196				
Sept. 3, 1963	1520	68	269				
Oct. 5, 1963	0805	63	43.9				
Nov. 7, 1963	1245	60	104				
Sept. 11, 1964	0845	76	77.2				
Oct. 28, 1964	1250	58	62.7				
Sept. 1, 1967	0910	71	92.1				
Mar. 22, 1968	1420	41	7,910				
Oct. 22, 1968	1430	62	129				

MISSISSIPPI RIVER MAIN STEM

7-0220. Mississippi River at Thebes, Ill.

Location.--Lat 37°13'00", long 89°27'50", in NW¼ sec.17, T.15 S., R.3 W., near center of span on downstream side of railroad bridge at Thebes, 5.0 miles downstream from Headwater Diversion Channel, and at mile 43.7 above Ohio River.

Drainage area.--717,200 sq mi, approximately.

Discharge records available.--Discharge: October 1932 to September 1968. Monthly discharge only for some periods, published in WSP 1311. Prior to April 1941, published as "at Cape Girardeau, Mo."

Gage heights: March 1933 to February 1938 and October 1939 to September 1968 in reports of Geological Survey (prior to April 1941, published as "at Cape Girardeau, Mo.") Since November 1878 under name of "at Grays Point" in files of St. Louis district office of Corps of Engineers. January 1879 to May 1896 published as "at Grays Point" and since May 1896, published as "at Cape Girardeau" in reports of Mississippi River Commission. February 1891 to February 1894 and since 1904, published as "at Cape Girardeau" in reports of U. S. Weather Bureau.

Maximum temperature measured.--91° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 10, 1952	0620	75	125,000
Oct. 14, 1953	1445	66	67,500
May 25, 1960	1520	70	379,000
July 20, 1960	0755	80	171,000
Aug. 17, 1960	1300	82	102,000
Sept. 7, 1960	0720	82	148,000
Sept. 15, 1960	1235	78	103,000
Nov. 22, 1960	0735	49	115,000
Dec. 14, 1960	0800	37	88,800
Dec. 21, 1960	0930	35	74,300
Feb. 2, 1961	0835	33	47,700
Feb. 7, 1961	0900	33	54,100
Mar. 7, 1961	0845	49	173,000
Mar. 28, 1961	0750	48	288,000
Apr. 18, 1961	0755	48	322,000
May 3, 1961	0725	62	264,000
May 11, 1961	0800	59	687,000
May 16, 1961	0745	65	587,000
May 24, 1961	1145	58	343,000
June 6, 1961	1400	74	206,000
June 13, 1961	0645	79	192,000
June 20, 1961	1335	76	223,000
June 27, 1961	1025	74	127,000
July 6, 1961	1100	80	148,000
July 12, 1961	1245	79	145,000
July 19, 1961	0645	80	98,400
July 26, 1961	0745	75	245,000
Aug. 2, 1961	1135	82	185,000
Aug. 8, 1961	0715	85	183,000
Aug. 17, 1961	0810	80	144,000
Aug. 23, 1961	1200	76	91,000
Aug. 30, 1961	1125	82	94,800
Sept. 6, 1961	0925	83	105,000
Sept. 12, 1961	1105	80	123,000
Sept. 19, 1961	1245	76	483,000
Sept. 29, 1961	1520	66	347,000
Oct. 4, 1961	1145	62	225,000
Oct. 11, 1961	1340	65	177,000
Oct. 17, 1961	0650	64	253,000
Oct. 25, 1961	1240	60	150,000
Oct. 31, 1961	1500	59	117,000
Nov. 7, 1961	1025	54	404,000
Nov. 29, 1961	0900	44	264,000
Dec. 21, 1961	1400	36	127,000
Dec. 28, 1961	0945	33	143,000
Jan. 4, 1962	1255	35	111,000
Jan. 8, 1962	1550	34	156,000
Jan. 18, 1962	1205	32	119,000
Jan. 31, 1962	0800	34	193,000
Feb. 14, 1962	1415	38	272,000
Feb. 20, 1962	0720	38	302,000
Mar. 6, 1962	0815	33	185,000
Mar. 27, 1962	1115	43	623,000
Mar. 29, 1962	0735	46	592,000
May 2, 1962	0725	65	333,000
May 16, 1962	1325	69	254,000
May 22, 1962	0725	77	217,000
June 6, 1962	0750	73	333,000
June 19, 1962	1135	76	289,000
July 11, 1962	1640	83	182,000
July 17, 1962	0900	59	179,000
July 25, 1962	1500	82	205,000
Aug. 8, 1962	1010	82	155,000
Sept. 6, 1962	0615	77	135,000
Sept. 19, 1962	1015	77	138,000
Sept. 25, 1962	0710	70	131,000
Oct. 24, 1962	0850	63	141,000
Oct. 30, 1962	0900	49	111,000
Nov. 21, 1962	0715	48	98,400
Dec. 28, 1962	0830	33	63,900
Jan. 25, 1963	1300	33	42,100
Feb. 12, 1963	1245	33	64,800
Mar. 13, 1963	0735	40	238,000
Mar. 26, 1963	0920	45	264,000
Apr. 3, 1963	0850	56	255,000
Apr. 30, 1963	0845	47	121,000
May 8, 1963	0755	61	185,000
May 15, 1963	1450	72	158,000
May 22, 1963	1755	66	268,000
June 5, 1963	0700	63	146,000
June 11, 1963	1020	69	133,000
July 3, 1963	0730	84	130,000
July 17, 1963	0710	82	98,900
Aug. 7, 1963	0805	87	99,800
Sept. 5, 1963	0755	78	82,000
Sept. 25, 1963	0725	72	77,200
Oct. 3, 1963	0800	77	72,700
Oct. 23, 1963	0820	69	67,500
Oct. 28, 1963	1120	65	68,900
Nov. 14, 1963	0745	52	68,600
Nov. 27, 1963	0830	53	84,400
Dec. 12, 1963	1430	38	55,000
Jan. 8, 1964	0855	33	46,300
Feb. 12, 1964	0815	36	56,500
Feb. 19, 1964	0800	39	52,000
Mar. 4, 1964	0930	45	52,700
Mar. 10, 1964	1200	36	175,000
Mar. 17, 1964	0640	40	114,000
Mar. 18, 1964	0700	41	106,000
Mar. 23, 1964	1055	46	99,100
Apr. 21, 1964	0750	53	146,000
May 20, 1964	0735	76	169,000
May 27, 1964	0725	77	155,000
June 3, 1964	0720	74	199,000
June 24, 1964	0815	80	280,000
June 30, 1964	0845	70	267,000
July 8, 1964	0825	81	128,000
July 22, 1964	0730	80	102,000
July 29, 1964	0830	85	91,500
Aug. 5, 1964	1330	91	72,600
Aug. 26, 1964	0830	77	71,400
Sept. 3, 1964	0940	81	69,700
Sept. 15, 1964	0730	72	139,000
Sept. 23, 1964	0800	76	114,000
Sept. 30, 1964	0825	67	118,000
Oct. 8, 1964	0835	62	94,400
Oct. 28, 1964	0800	57	67,200
Nov. 13, 1964	0820	60	72,500
Nov. 18, 1964	0820	50	91,400
Nov. 25, 1964	0825	45	96,700
Dec. 2, 1964	1645	39	79,400
Dec. 9, 1964	0900	43	56,700

Temperature and Discharge of Mississippi River at Thebes, Ill.--Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 30, 1964	1230	38	52,700	Dec. 14, 1966	1100	40	111,000
Jan. 13, 1965	0820	38	104,000	Dec. 20, 1966	1200	42	110,000
Jan. 20, 1965	1430	35	64,500	Dec. 29, 1966	1525	36	90,200
Jan. 27, 1965	1300	36	202,000	Jan. 4, 1967	1130	35	74,400
Feb. 4, 1965	0900	33	86,300	Jan. 10, 1967	0715	33	72,100
Feb. 17, 1965	0635	35	194,000	Jan. 16, 1967	1545	36	72,500
Mar. 3, 1965	0645	37	117,000	Jan. 24, 1967	0940	43	61,900
Mar. 10, 1965	1600	38	247,000	Jan. 31, 1967	0900	39	99,000
Mar. 17, 1965	1520	37	256,000	Feb. 6, 1967	1530	34	136,000
Mar. 24, 1965	0927	35	350,000	Feb. 14, 1967	0955	38	110,000
Apr. 6, 1965	1710	48	325,000	Feb. 20, 1967	1425	40	111,000
Apr. 22, 1965	1445	56	484,000	Mar. 2, 1967	0945	36	87,700
Apr. 28, 1965	0710	55	419,000	Mar. 7, 1967	1025	37	96,000
May 8, 1965	1350	64	425,000	Mar. 15, 1967	1045	46	122,000
May 12, 1965	1345	69	409,000	Mar. 21, 1967	0930	42	124,000
May 25, 1965	0540	74	250,000	Mar. 28, 1967	0955	53	171,000
June 2, 1965	1255	72	269,000	Apr. 4, 1967	1050	56	250,000
June 9, 1965	0545	73	364,000	Apr. 11, 1967	1030	56	278,000
June 16, 1965	0520	75	293,000	Apr. 19, 1967	1310	59	394,000
June 22, 1965	1735	77	244,000	Apr. 25, 1967	1100	60	332,000
June 29, 1965	0645	79	216,000	May 2, 1967	1020	55	302,000
July 7, 1965	1050	81	317,000	May 9, 1967	0845	58	251,000
July 13, 1965	0545	80	216,000	May 16, 1967	1010	58	248,000
July 22, 1965	0645	81	179,000	May 25, 1967	0950	66	180,000
July 27, 1965	0520	81	304,000	June 1, 1967	1130	69	148,000
Aug. 4, 1965	1050	83	112,000	June 6, 1967	1130	74	227,000
Aug. 11, 1965	1200	81	120,000	June 13, 1967	1235	78	246,000
Aug. 18, 1965	0955	86	99,400	June 21, 1967	1140	79	454,000
Aug. 26, 1965	1215	82	94,800	June 29, 1967	1705	75	515,000
Aug. 31, 1965	0615	76	128,000	July 11, 1967	1030	78	294,000
Sept. 8, 1965	1205	79	210,000	July 18, 1967	0950	78	192,000
Sept. 14, 1965	1200	75	250,000	Aug. 1, 1967	1100	83	209,000
Sept. 21, 1965	0655	72	279,000	Aug. 16, 1967	1130	80	106,000
Oct. 5, 1965	1210	63	324,000	Aug. 23, 1967	1005	77	106,000
Oct. 12, 1965	0655	58	257,000	Aug. 31, 1967	1240	75	85,700
Oct. 27, 1965	0610	57	173,000	Sept. 6, 1967	1015	74	82,400
Nov. 3, 1965	1120	57	156,000	Sept. 12, 1967	1225	73	77,800
Nov. 9, 1965	1200	56	141,000	Oct. 4, 1967	1110	71	87,900
Nov. 23, 1965	0655	48	147,000	Oct. 10, 1967	1300	63	108,000
Nov. 30, 1965	1200	46	131,000	Oct. 16, 1967	1435	60	120,000
Dec. 15, 1965	1200	42	124,000	Oct. 23, 1967	1400	61	137,000
Dec. 28, 1965	1245	39	209,000	Oct. 31, 1967	1155	54	118,000
Jan. 4, 1966	0710	42	223,000	Nov. 7, 1967	1140	49	315,000
Jan. 11, 1966	0715	33	168,000	Nov. 14, 1967	1240	49	163,000
Jan. 25, 1966	0750	33	119,000	Nov. 20, 1967	1720	46	126,000
Feb. 16, 1966	0640	37	353,000	Nov. 29, 1967	1340	44	118,000
Mar. 1, 1966	0645	36	199,000	Dec. 5, 1967	1630	42	180,000
Mar. 15, 1966	0620	41	196,000	Dec. 20, 1967	1200	42	177,000
Mar. 22, 1966	1600	53	192,000	Dec. 27, 1967	1340	36	242,000
Mar. 29, 1966	0935	47	235,000	Jan. 22, 1968	1525	38	91.100
Apr. 5, 1966	1445	48	242,000	Jan. 30, 1968	1300	41	145,000
Apr. 19, 1966	1520	55	241,000	Feb. 7, 1968	1120	40	295,000
May 3, 1966	1225	62	287,000	Feb. 13, 1968	1115	34	185,000
May 10, 1966	0940	63	244,000	Feb. 20, 1968	1250	36	147,000
May 17, 1966	1645	59	312,000	Feb. 27, 1968	1305	36	119,000
June 1, 1966	0535	71	259,000	Mar. 5, 1968	1115	42	105,000
June 9, 1966	0500	74	177,000	Mar. 19, 1968	1115	49	147,000
June 28, 1966	1640	80	148,000	Mar. 26, 1968	1335	50	172,000
July 6, 1966	1325	86	159,000	Apr. 2, 1968	1200	54	160,000
July 19, 1966	0850	86	134,000	Apr. 16, 1968	1125	60	154,000
Aug. 2, 1966	1040	81	121,000	May 1, 1968	1145	62	237,000
Aug. 10, 1966	0545	81	94,900	May 8, 1968	0725	63	165,000
Aug. 16, 1966	1150	81	97,400	May 14, 1968	0720	63	154,000
Aug. 23, 1966	0835	79	119,000	May 22, 1968	1010	64	153,000
Aug. 30, 1966	1050	79	104,000	May 28, 1968	1125	63	385,000
Sept. 7, 1966	0515	79	100,000	June 6, 1968	1335	70	273,000
Sept. 13, 1966	1200	78	81,600	June 13, 1968	1140	80	169,000
Sept. 20, 1966	1045	69	79,500	June 20, 1968	1245	82	169,000
Sept. 27, 1966	0545	67	80,900	June 27, 1968	1200	76	184,000
Oct. 5, 1966	0900	63	72,200	July 2, 1968	1325	82	224,000
Oct. 11, 1966	1115	65	71,100	July 9, 1968	1145	78	238,000
Oct. 20, 1966	0925	58	99,800	July 16, 1968	1130	80	229,000
Oct. 26, 1966	0920	54	95,900	July 25, 1968	1225	81	186,000
Nov. 8, 1966	1300	53	81,600	July 30, 1968	1205	83	244,000
Nov. 17, 1966	0930	51	89,800	Sept. 20, 1968	1315	74	115,000
Nov. 21, 1966	0925	48	84,700	Sept. 25, 1968	1445	70	135,000
Nov. 29, 1966	1045	46	98,300	Oct. 3, 1968	0850	67	137,000
Dec. 6, 1966	1415	44	84,300	Oct. 11, 1968	1215	62	123,000

MISSISSIPPI RIVER MAIN STEM

Temperature and Discharge of Mississippi River at Thebes, Ill.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 16, 1968	0910	64	169,000				
Oct. 23, 1968	0925	64	186,000				
Oct. 29, 1968	1115	54	171,000				
Nov. 7, 1968	1645	50	178,000				
Nov. 15, 1968	0855	54	168,000				
Nov. 19, 1968	1650	43	236,000				
Nov. 27, 1968	1055	45	155,000				
Dec. 5, 1968	1655	41	197,000				
Dec. 18, 1968	0825	48	96,600				
Dec. 27, 1968	1145	42	111,000				
Jan. 17, 1969	0735	39	109,000				
Jan. 23, 1969	1200	38	271,000				
Feb. 6, 1969	1735	41	306,000				
Feb. 14, 1969	0910	36	300,000				
Feb. 19, 1969	1100	36	218,000				
Feb. 26, 1969	0900	36	195,000				
Mar. 6, 1969	1155	40	242,000				
Mar. 13, 1969	0920	35	211,000				
Mar. 19, 1969	1625	47	160,000				
Mar. 28, 1969	0900	44	409,000				
Apr. 3, 1969	1150	62	353,000				
Apr. 8, 1969	1315	50	415,000				
Apr. 17, 1969	1135	62	420,000				
May 1, 1969	1130	59	481,000				
May 7, 1969	0830	58	465,000				
May 14, 1969	1125	62	409,000				
May 20, 1969	0840	62	324,000				
May 29, 1969	1110	76	316,000				
June 3, 1969	0910	66	271,000				
June 12, 1969	1145	83	224,000				
June 19, 1969	1230	74	279,000				
June 26, 1969	0840	73	379,000				
July 2, 1969	1405	78	453,000				
July 10, 1969	0850	79	586,000				
July 17, 1969	0915	80	641,000				
July 25, 1969	0910	82	428,000				
July 31, 1969	0910	78	309,000				
Aug. 5, 1969	1320	83	234,000				
Aug. 13, 1969	0955	82	220,000				
Aug. 21, 1969	1130	79	179,000				
Aug. 27, 1969	0915	83	151,000				
Sept. 4, 1969	1325	77	144,000				
Sept. 16, 1969	1135	76	138,000				
Sept. 25, 1969	1145	72	145,000				

ST. FRANCIS RIVER BASIN

7-0330. Wolf Creek near Farmington, Mo.

Location.--Lat 37°45'45", long 90°23'15", in SE¼ sec.5, T.35 N., R.6 E., at bridge on U. S. Highway 61, 1¼ mile downstream from Sand Creek and 1½ mile southwest of Farmington.

Drainage area.--40.3 sq mi.

Discharge records available.--March to September 1939 (discontinued). Discharge measurements only from October 1954 to September 1969.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 4, 1963	1035	50	21.8				
Oct. 24, 1963	0900	70	.98				
Dec. 5, 1963	1020	33	2.81				
Mar. 5, 1964	1130	45	21.0				
July 9, 1964	0820	80	1.00				
Sept. 4, 1964	0850	70	.83				
Oct. 9, 1964	1255	52	1.19				
Dec. 3, 1964	1155	35	4.49				
Jan. 21, 1965	0845	33	4.63				
Apr. 29, 1965	1025	52	5.44				
Apr. 26, 1967	1200	52	229				

ST. FRANCIS RIVER BASIN

7-0355. Barnes Creek near Fredericktown, Mo.

Location.--Lat 37°34'20", long 90°23'00", in SW¼SE¼ sec.4, T.33 N., R.6 E., on right downstream abutment of bridge on State Highway 72, 1.1 miles upstream from Little St. Francis River and 5.3 miles west of Fredericktown.

Drainage area.--4.03 sq mi.

Discharge records available.--September 1955 to September 1959 (discontinued). Discharge measurements and gage-height record available October 1959 to September 1969.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temr. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 13, 1956	1510	34	3.76				
Apr. 2, 1956	1310	48	.77				
May 1, 1956	1000	50	5.13				
May 15, 1956	1300	55	86.8				
July 31, 1957	1410	81	.74				
Dec. 11, 1958	1005	36	1.68				
Dec. 3, 1959	1515	49	.35				
Feb. 8, 1961	0915	33	.83				
Mar. 1, 1961	1230	48	4.88				
May 3, 1961	1725	60	1.27				
June 7, 1961	1020	68	.52				
July 12, 1961	1710	80	.01				
Nov. 8, 1961	0700	33	.08				
Jan. 4, 1962	1530	42	.51				
Mar. 7, 1962	1115	33	2.78				
Apr. 6, 1962	1100	52	2.62				
May 3, 1962	0500	70	5.97				
June 8, 1962	0930	70	.20				
Sept. 7, 1962	1750	70	.09				
Oct. 4, 1962	1555	60	.19				
Oct. 31, 1962	0825	45	.13				
Dec. 7, 1962	1200	33	.10				
Jan. 9, 1963	1450	54	1.15				
Feb. 7, 1963	1305	35	.31				
Mar. 7, 1963	0835	36	3.32				
Apr. 4, 1963	0830	50	2.82				
May 8, 1963	1350	57	.56				
June 5, 1963	1230	59	.38				
Aug. 14, 1963	1555	78	.15				
Dec. 5, 1963	0835	33	.06				
Jan. 15, 1964	1120	33	.16				
Feb. 12, 1964	1420	41	.41				
Mar. 5, 1964	0905	45	5.13				
Apr. 2, 1964	1530	59	1.17				
May 13, 1964	1435	66	.39				
Dec. 3, 1964	1020	37	.22				
Jan. 20, 1965	1710	38	.52				
Mar. 11, 1965	0830	36	2.92				
Apr. 29, 1965	0755	52	.80				
June 9, 1965	1250	76	2.75				
Nov. 30, 1965	1520	42	.07				
Jan. 19, 1966	1010	33	.54				
Apr. 13, 1966	1100	48	16.6				
Oct. 11, 1966	1400	65	.08				
Dec. 30, 1966	1130	36	4.25				
Apr. 26, 1967	0955	53	26.8				
June 14, 1967	0655	71	.05				
Dec. 28, 1967	1140	36	2.43				
May 15, 1968	1730	74	4.24				
Dec. 6, 1968	1230	39	1.62				
Jan. 24, 1969	1145	35	11.4				
Mar. 20, 1969	1245	59	.73				
Apr. 24, 1969	1000	56	2.74				
June 4, 1969	1055	64	.29				
July 10, 1969	1700	89	.43				

ST. FRANCIS RIVER BASIN

7-0369.4 Big Creek at Chloride, Mo.

Location.--Lat 37°27'40", long 90°41'10", Iron County, at bridge on county highway at Chloride.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 2, 1966	1225	40	11.7				
Jan. 9, 1967	1420	34	16.4				
Feb. 6, 1967	1505	40	34.4				
Mar. 20, 1967	1230	47	21.3				
Apr. 28, 1967	0900	54	43.1				
May 29, 1967	1340	72	4.49				
July 25, 1967	1420	76	3.29				
Aug. 28, 1967	1300	69	.49				
Oct. 12, 1967	1300	54	1.93				
Nov. 7, 1967	0955	42	8.40				
Dec. 11, 1967	1640	45	44.8				
Jan. 22, 1968	1335	45	11.9				
Mar 18, 1968	1330	47	63.3				
May 17, 1968	1440	58	24.2				
Aug. 8, 1968	1240	78	1.00				
Oct. 10, 1968	1305	59	1.78				
Oct. 16, 1968	1725	71	.99				
Dec. 10, 1968	1200	39	10.6				
Feb. 1, 1969	1205	42	71.2				
Mar. 14, 1969	0920	36	14.1				
Apr. 8, 1969	0930	55	37.9				
May 22, 1969	1345	66	8.47				
July 16, 1969	1145	82	.93				
Sept. 25, 1969	1120	62	1.78				

ST. FRANCIS RIVER BASIN

7-0375. St. Francis River near Patterson, Mo.

Location.--Lat 37°11'40", long 90°30'10", in NE¼ sec.16, T.29 N., R.5 E., near left bank on downstream side of pier of bridge on State Highway 34, 1 mile upstream from Clarks Creek, and 3 miles east of Patterson.

Drainage area.--956 sq mi.

Discharge records available.--October 1920 to September 1969. Prior to June 1921, monthly discharge only, published in WSP 1311.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 21, 1946	0835	49	503
Feb. 28, 1947	0835	43	212
May 9, 1947	0810	64	832
June 19, 1947	0815	77	161
July 31, 1947	1300	88	84.0
Sept. 4, 1947	1250	84	47.8
Nov. 30, 1947	1145	43	446
June 23, 1948	0850	78	139
Aug. 4, 1948	1120	79	110
Dec. 17, 1948	1000	54	673
Apr. 20, 1949	1445	59	521
Aug. 22, 1949	1620	82	62.3
Oct. 1, 1949	0925	60	83.0
Nov. 7, 1949	1630	47	389
July 26, 1950	0920	61	209
Oct. 14, 1950	1425	70	152
May 9, 1951	1755	69	5,670
Aug. 27, 1952	1210	72	48.5
July 14, 1953	1725	74	44.4
Aug. 12, 1953	1025	77	18.8
Sept. 23, 1953	0710	65	13.4
Nov. 12, 1953	0800	46	39.7
Dec. 16, 1953	0900	42	67.3
Jan. 27, 1954	1215	46	334
May 15, 1954	0735	69	346
Apr. 25, 1961	1000	65	983
June 20, 1961	1500	73	741
Aug. 31, 1961	1545	78	45.0
Oct. 31, 1961	1310	67	42.8
Aug. 21, 1962	1020	76	22.0
Oct. 30, 1962	0730	60	93.7
Feb. 12, 1963	1215	38	137
Aug. 7, 1963	0950	81	75.0
Sept. 9, 1963	1540	81	59.2
Oct. 15, 1963	1335	71	26.7
Nov. 19, 1963	1405	55	54.4
Dec. 17, 1963	1700	36	104
Jan. 23, 1964	0845	46	111
Mar. 3, 1964	1155	49	247
June 16, 1964	1630	78	69.7
July 28, 1964	1330	84	41.8
Sept. 2, 1964	1255	83	53.4
Oct. 6, 1964	1315	65	45.1
Dec. 15, 1964	1305	45	17.6
Jan. 14, 1965	1200	42	203
Mar. 23, 1965	1125	38	293
Feb. 14, 1965	1435	42	1,050
Apr. 27, 1965	1245	64	400
June 4, 1965	1100	78	341
July 8, 1965	1315	83	75.9
Aug. 5, 1965	1350	80	19.8
Aug. 31, 1965	1345	74	23.1
Oct. 7, 1965	1640	64	228
Nov. 6, 1965	0845	58	79.3
Dec. 16, 1965	1040	46	486
Jan. 18, 1966	1640	40	368
Feb. 16, 1966	1030	42	1,940
Mar. 22, 1966	1130	58	541
May 3, 1966	1230	61	1,940
June 10, 1966	1510	78	242
July 13, 1966	1435	89	39.8
Aug. 19, 1966	0835	77	483
Sept. 20, 1966	1210	56	71.0
Oct. 27, 1966	1050	58	138
Dec. 1, 1966	1250	46	578
Feb. 7, 1967	1705	40	1,480
Mar. 21, 1967	1300	55	652
Apr. 26, 1967	1810	58	778
June 1, 1967	1500	70	467
Aug. 29, 1967	1350	75	20.3
Oct. 11, 1967	1420	60	57.0
Dec. 7, 1967	1105	46	847
Jan. 23, 1968	1440	41	609
Mar. 22, 1968	0935	42	7,310
May 16, 1968	1110	68	1,440
June 26, 1968	1530	77	71.0
Aug. 7, 1968	1535	86	86.1
Oct. 9, 1968	1420	60	45.3
Dec. 11, 1968	0935	39	372
Feb. 5, 1969	1700	41	1,520
Mar. 19, 1969	1455	42	785
Apr. 17, 1969	1355	62	3,210
May 22, 1969	1030	66	1,040
July 1, 1969	1435	84	139
July 23, 1969	1005	78	151
Sept. 24, 1969	1445	74	88.9

ST. FRANCIS RIVER BASIN

7-0395. St. Francis River at Wappapello, Mo.

Location.--Lat 36°55'41", long 90°15'55", in NW¼SE¼ sec.2, T.26 N., R.7 E., on right bank at downstream side of highway bridge, 0.5 mile southeast of Wappapello and 1.25 miles downstream from Wappapello Dam.

Drainage area.--1,311 sq mi.

Discharge records available.--October 1940 to September 1969 in reports of Geological Survey. Since January 1939 in reports of Mississippi River Commission. Gage-height records collected in this vicinity since April 1920 are contained in reports of the Corps of Engineers.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 1, 1946	0630	78	40.8				
Oct. 16, 1946	0825	63	37.0				
June 19, 1947	1310	74	34.6				
Aug. 2, 1947	0715	80	365				
Sept. 7, 1947	0900	75	267				
Dec. 3, 1947	1525	43	292				
June 10, 1949	0750	72	36.1				
Aug. 25, 1949	1200	81	35.9				
Oct. 1, 1949	1415	53	39.5				
Nov. 10, 1949	1640	54	365				
Oct. 17, 1950	0650	64	39.6				
Aug. 15, 1953	1630	77	35.3				
Dec. 18, 1953	1410	37	836				
Jan. 30, 1954	1120	46	540				
Sept. 1, 1961	0630	75	39.9				
Nov. 2, 1961	0715	60	37.9				
Aug. 21, 1962	1450	75	43.6				
Dec. 3, 1962	1400	48	299				
Feb. 14, 1963	1420	40	275				
Apr. 26, 1963	1055	66	424				
Aug. 9, 1963	1310	83	71.5				
Sept. 11, 1963	1525	80	135				
Oct. 17, 1963	1540	67	39.6				
June 17, 1964	1120	76	39.2				
July 30, 1964	1630	73	312				
Nov. 4, 1964	1030	59	153				
May 3, 1966	1530	62	7,410				
June 6, 1969	0900	76	217				
July 28, 1969	1620	83	---				

7-0377. Clark Creek near Piedmont, Mo.

Location.--Lat 37°11'10", long 90°37'45", in SE¼NE¼ sec.17, T.29 N., R.4 E., at downstream side of right abutment of bridge on State Highway 34, 3.5 miles northeast of Piedmont.

Drainage area.--4.39 sq mi.

Discharge records available.--October 1956 to September 1959 (discontinued). Discharge measurements and gage-height record available October 1959 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 14, 1961	0930	44	1.76				
Apr. 25, 1961	0905	65	3.42				
May 16, 1961	1100	64	3.94				
June 20, 1961	1245	69	1.29				
Aug. 31, 1961	1420	76	.39				
Jan. 30, 1962	1130	47	3.55				
Apr. 2, 1962	1645	48	4.87				
Aug. 21, 1962	0810	75	.34				
Oct. 30, 1962	0530	57	.89				
Dec. 5, 1962	0730	44	.71				
Feb. 11, 1963	1830	39	.59				
Apr. 23, 1963	0845	59	.74				
Aug. 7, 1963	0820	72	.84				
Oct. 15, 1963	1215	71	.45				
Nov. 19, 1963	1500	54	.60				
Dec. 17, 1963	1605	40	.78				
Jan. 23, 1964	0930	50	.58				
Mar. 3, 1964	1020	50	1.20				
June 16, 1964	1515	78	.48				
July 28, 1964	1145	62	.75				
Oct. 6, 1964	1125	60	.49				
Nov. 3, 1964	1030	57	.59				
Dec. 15, 1964	1140	43	1.21				
Feb. 13, 1965	1245	42	4.28				
Mar. 23, 1965	1050	49	1.41				
Apr. 27, 1965	1100	58	2.18				
June 4, 1965	1140	59	1.55				
July 8, 1965	1655	77	.97				
Aug. 5, 1965	1500	60	.44				
Aug. 31, 1965	1245	71	.39				
Oct. 8, 1965	0920	58	1.18				
Nov. 6, 1965	1150	58	.58				
Dec. 16, 1965	1215	48	1.10				
Jan. 18, 1966	1400	42	1.60				
Mar. 22, 1966	0910	57	1.67				
May 4, 1966	0950	60	6.00				
July 13, 1966	1605	87	.35				
Sept. 20, 1966	1140	61	.54				
Dec. 1, 1966	1440	45	.85				
Jan. 10, 1967	1235	38	1.56				
Feb. 7, 1967	1430	40	4.08				
Mar. 21, 1967	1050	54	2.77				
Apr. 27, 1967	1700	65	1.06				
Aug. 29, 1967	1145	68	.37				
Oct. 12, 1967	0855	45	0.33				
Dec. 12, 1967	0725	45	17.2				
Jan. 23, 1968	1210	45	1.12				
Mar. 12, 1968	0830	36	8.67				
May 16, 1968	0825	60	4.37				
Aug. 7, 1968	1710	82	1.03				
Oct. 9, 1968	1540	60	0.94				
Dec. 10, 1968	1625	46	1.31				
Feb. 1, 1969	0955	42	11.7				
Mar. 13, 1969	1540	50	1.77				
Apr. 17, 1969	1525	62	5.98				
May 21, 1969	1755	68	3.88				
July 23, 1969	0840	71	1.12				
Sept. 24, 1969	1625	70	0.60				

ST. FRANCIS RIVER BASIN

7-0340. St. Francis River near Roselle, Mo.

Location.--Lat 37°35'45", long 90°29'50", in NE¼ sec.4, T.33 N., R.5 E., at bridge on State Highway 70, one-quarter of a mile upstream from Stouts Creek and 1½ mile east of Roselle.

Drainage area.--239 sq mi.

Discharge records available.--February to September 1939 (discontinued). Discharge measurements only from October 1939 to September 1969.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 22, 1961	1400	70	0.76				
June 19, 1962	1500	58	8.73				
Aug. 23, 1962	0805	81	.32				
Nov. 9, 1962	1135	47	13.6				
Aug. 16, 1963	0640	69	18.2				
Oct. 2, 1963	1110	65	.33				
Nov. 7, 1963	1655	53	2.53				
Sept. 11, 1964	0800	72	.71				
Oct. 21, 1964	0755	53	.33				
Sept. 5, 1967	1030	70	.54				

ST. FRANCIS RIVER BASIN

7-0350. Little St. Francis River at Fredericktown, Mo.

Location.--Lat 37°33'30", long 90°18'45", in SE¼ sec.7, T.33 N., R.7 E., at bridge on State Highway 72,half mile below Saline Creek, 1 mile west of Fredericktown.

Drainage area.--90.5 sq mi.

Discharge records available.--February to September 1939, and October 1959 to September 1961. (Discontinued).

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Dec. 3, 1959	1600	50	13.9				
Feb. 13, 1960	1420	42	53.4				
Sept. 7, 1960	1535	80	.93				
Mar. 1, 1961	0935	43	120				
May 3, 1961	1535	62	40.6				
June 6, 1961	1840	75	122				
July 12, 1961	1630	77	5.04				
Aug. 8, 1961	1555	80	3.84				
Sept. 7, 1961	0715	72	.64				
Oct. 4, 1961	1310	62	.47				

ST. FRANCIS RIVER BASIN

7-0410. Little River ditch 81 near Kennett, Mo.

Location.--Lat 36°14'10", long 89°58'55", in NE¼ sec.4, T.18 N., R.10 E., on downstream side of bridge on State Highway 84, about 4 miles east of Kennett.

Drainage area.--111 sq mi.

Discharge records available.--October 1926 to September 1969.

Maximum temperature measured.--93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 13, 1946	0755	62	125
Oct. 15, 1946	1120	61	45.6
Nov. 14, 1946	1515	52	96.8
Dec. 19, 1946	1200	42	145
Mar. 4, 1947	1345	48	85.2
Apr. 6, 1947	0900	56	89.4
June 21, 1947	0835	75	251
Aug. 3, 1947	0720	76	67.4
Sept. 8, 1947	1235	79	36.6
Oct. 14, 1947	0630	72	31.5
Dec. 3, 1947	0735	44	67.2
Apr. 11, 1948	0600	64	194
May 22, 1948	0700	73	120
June 25, 1948	0845	80	106
Aug. 10, 1948	0840	80	56.6
June 9, 1949	1335	76	160
July 14, 1949	1705	80	108
Aug. 24, 1949	1435	80	103
Oct. 2, 1949	1545	58	66.4
Nov. 10, 1949	0950	53	116
June 14, 1950	1435	62	178
July 27, 1950	1015	73	245
Oct. 16, 1950	0645	70	82.2
Jan. 8, 1951	1745	42	165
Mar. 27, 1951	1140	55	176
May 11, 1951	0830	72	122
Aug. 11, 1951	0800	78	135
Dec. 19, 1951	1200	40	217
July 18, 1952	1335	78	71.0
Jan. 15, 1953	1055	52	50.3
Feb. 26, 1953	1135	47	114
Apr. 8, 1953	1100	69	121
July 17, 1953	0825	71	68.5
Aug. 14, 1953	1430	91	40.9
Aug. 15, 1953	0720	81	40.8
Jan. 29, 1954	1445	46	85.2
Feb. 15, 1961	1255	59	73.7
Apr. 26, 1961	1025	64	169
Aug. 30, 1961	0730	77	53.1
Nov. 1, 1961	1430	74	43.1
Apr. 5, 1962	1400	58	208
Aug. 22, 1962	1600	80	44.7
Oct. 31, 1962	0935	60	70.3
Dec. 4, 1962	0735	51	53.7
Feb. 14, 1963	0710	37	51.8
Apr. 25, 1963	1325	66	62.5
Aug. 8, 1963	1705	87	59.0
Sept. 10, 1963	1625	70	36.5
Oct. 17, 1963	0715	65	28.5
Nov. 18, 1963	1415	59	34.4
Dec. 19, 1963	1515	32	30.2
Jan. 28, 1964	1145	35	33.2
June 18, 1964	1105	77	76.4
July 30, 1964	0940	79	71.0
Sept. 4, 1964	0720	75	39.6
Oct. 8, 1964	1010	55	70.6
Nov. 5, 1964	1030	61	50.4
Dec. 21, 1964	1620	40	104
Jan. 11, 1965	1430	37	306
Feb. 12, 1965	1445	46	1,850
Mar. 25, 1965	0815	44	135
Apr. 28, 1965	0925	60	136
June 2, 1965	1715	80	113
Aug. 3, 1965	1215	82	70.0
Oct. 5, 1965	0855	57	127
Nov. 10, 1965	0840	54	65.4
Jan. 11, 1966	0930	48	249
Feb. 17, 1966	1655	50	254
Mar. 24, 1966	0920	48	125
Apr. 25, 1966	1700	64	807
Apr. 27, 1966	1600	65	1,690
July 11, 1966	1540	93	96.6
Aug. 16, 1966	1520	82	153
Sept. 22, 1966	1300	68	57.8
Oct. 25, 1966	1500	60	51.3
Nov. 28, 1966	1510	48	57.8
Jan. 12, 1967	0735	44	71.9
Feb. 8, 1967	1335	37	104
Mar. 22, 1967	1040	60	106
Apr. 24, 1967	1540	64	81.7
May 16, 1967	1655	65	1,800
May 30, 1967	1315	76	144
Oct. 8, 1968	1245	63	46.3
Dec. 5, 1968	0950	40	141
Jan. 22, 1969	1655	49	334
Mar. 10, 1969	1635	46	149
May 19, 1969	1725	68	169
July 24, 1969	1355	85	80.1
Sept. 23, 1969	0855	70	36.2

ST. FRANCIS RIVER BASIN

7-0420. Little River ditch 1 near Kennett, Mo.

Location.--Lat 36°14'10", long 89°58'50", in NE¼ sec.4, T.18 N., R.10 E., on downstream side of bridge on State Highway 84, 4 miles east of Kennett.

Drainage area.--235 sq mi.

Discharge records available.--October 1926 to September 1969.

Maximum temperature measured.--97° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 31, 1945	1000	79	84.6
Oct. 12, 1945	0815	59	198
Oct. 15, 1946	1330	68	51.3
Nov. 14, 1946	1355	53	124
Dec. 19, 1946	1045	43	266
Jan. 26, 1947	0740	48	372
Mar. 4, 1947	1315	48	123
Apr. 6, 1947	0740	58	131
June 22, 1947	0700	75	276
Sept. 8, 1947	1130	81	53.6
Oct. 14, 1947	0720	69	46.8
Dec. 2, 1947	1610	49	92.2
Apr. 12, 1948	0625	64	355
May 22, 1948	0815	74	174
June 25, 1948	0730	74	158
Aug. 10, 1948	0710	80	82.6
June 9, 1949	1110	77	302
July 14, 1949	1540	81	191
Aug. 24, 1949	1315	80	166
Oct. 2, 1949	1640	63	97.6
Nov. 9, 1946	1430	57	146
June 14, 1950	1545	63	268
July 27, 1950	1115	78	248
Aug. 31, 1950	1030	72	247
Oct. 16, 1950	1700	72	109
Nov. 16, 1950	0920	58	205
Jan. 9, 1951	0920	41	334
May 11, 1951	0925	69	205
Aug. 11, 1951	0840	81	234
Dec. 19, 1951	1200	40	474
July 18, 1952	1205	76	92.1
Aug. 29, 1952	0910	82	45.9
Jan. 15, 1953	1000	44	67.2
Feb. 26, 1953	1050	48	204
Apr. 9, 1953	1000	69	252
July 17, 1953	0710	69	92.0
Aug. 14, 1953	1330	91	46.2
Sept. 25, 1953	0800	69	25.6
Jan. 29, 1954	1345	45	149
Feb. 15, 1961	1205	57	159
Apr. 26, 1961	0935	66	416
Aug. 30, 1961	0820	79	66.3
Nov. 1, 1961	1345	74	47.2
Aug. 22, 1962	1530	79	59.0
Oct. 31, 1962	1050	60	95.0
Feb. 13, 1963	1800	40	57.5
Apr. 25, 1963	1220	65	95.2
Aug. 8, 1963	1825	87	64.2
Sept. 10, 1963	1600	89	46.0
Oct. 16, 1963	1640	72	35.4
Nov. 15, 1963	1445	60	43.5
Dec. 19, 1963	1400	34	45.0
Jan. 28, 1964	1220	43	33.7
June 18, 1964	0945	76	85.8
July 30, 1964	1030	79	82.6
Sept. 3, 1964	1735	82	57.8
Oct. 8, 1964	1100	60	98.2
Nov. 5, 1964	0910	61	58.7
Dec. 21, 1964	1535	41	163
Jan. 12, 1965	0820	39	790
Mar. 25, 1965	0915	43	244
Apr. 28, 1965	1015	61	235
June 2, 1965	1620	76	149
July 6, 1965	0830	84	176
Aug. 3, 1965	1220	83	74.5
Sept. 1, 1965	1445	77	187
Oct. 5, 1965	0930	59	301
Nov. 10, 1965	0955	54	81.9
Dec. 14, 1965	0900	49	108
Jan. 11, 1966	1435	48	529
Feb. 18, 1966	0830	46	451
Mar. 24, 1966	1030	51	200
Apr. 26, 1966	0910	65	1,700
Apr. 27, 1966	1500	65	4,460
June 8, 1966	0725	79	257
July 11, 1966	1640	97	106
Sept. 22, 1966	1355	71	58.9
Oct. 25, 1966	1605	59	52.5
Nov. 28, 1966	1620	47	53.7
Jan. 12, 1967	0840	35	101
Feb. 8, 1967	1535	36	176
Mar. 22, 1967	1200	59	167
Apr. 24, 1967	1755	63	106
May 16, 1967	1650	64	4,690
Aug. 30, 1967	1150	77	50.2
Oct. 9, 1967	1755	64	51.4
Jan. 25, 1968	1320	39	324
Mar. 13, 1968	0915	37	278
Mar. 22, 1968	1245	38	4,790
May 14, 1968	1820	68	3,050
June 25, 1968	1405	78	147
Aug. 6, 1968	1250	84	133
Oct. 8, 1968	1340	64	40.4
Dec. 5, 1968	1215	40	344
Mar. 10, 1969	1745	46	207
Apr. 16, 1969	1140	64	1,250
May 19, 1969	1420	68	233
July 24, 1969	1445	86	61.8
Sept. 23, 1969	1000	72	30.2

ST. FRANCIS RIVER BASIN

7-0425. Little River ditch 251 near Lilbourn, Mo.

Location.--Lat 36°33'20", long 89°40'10", on line between secs.8 and 17, T.22 N., R.13 E., on downstream side of left pier of bridge on U. S. Highway 62, 3.7 miles southwest of Lilbourn, and 4 miles northwest of Marston.

Drainage area.--235 sq mi.

Discharge records available.--October 1945 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 12, 1946	1605	60	198
Oct. 14, 1946	1500	63	92.5
Nov. 13, 1946	1130	51	170
Mar. 4, 1947	0835	43	151
June 21, 1947	0730	72	198
Aug. 2, 1947	1500	86	133
Sept. 6, 1947	0810	74	74.8
Dec. 2, 1947	0750	44	129
June 24, 1948	0925	75	165
Aug. 9, 1948	0800	86	102
Aug. 23, 1949	1705	75	142
Oct. 2, 1949	1410	61	108
Nov. 9, 1949	0900	50	187
July 27, 1950	0820	58	255
Aug. 30, 1950	1640	76	169
Oct. 15, 1950	1710	68	143
May 11, 1951	1555	68	241
June 29, 1951	1730	66	252
Aug. 10, 1951	1450	81	181
Sept. 27, 1951	0915	68	131
July 17, 1952	1030	76	146
Aug. 28, 1952	1405	80	82.5
Jan. 14, 1953	1420	49	119
Feb. 25, 1953	1630	53	189
July 16, 1953	1000	74	110
Aug. 13, 1953	1700	85	74.8
Sept. 24, 1953	1310	67	38.7
Dec. 17, 1953	1305	35	52.0
Jan. 29, 1954	0815	46	137
May 16, 1954	1110	71	148
Feb. 15, 1961	0840	54	173
Apr. 26, 1961	0630	65	342
Aug. 30, 1961	1130	79	138
Nov. 1, 1961	1035	68	97.7
Aug. 22, 1962	1245	79	119
Nov. 1, 1962	0640	55	212
Dec. 4, 1962	1040	54	152
Feb. 13, 1963	1420	44	131
Apr. 24, 1963	1700	65	156
Aug. 8, 1963	1415	79	95.6
Sept. 10, 1963	1315	81	95.1
Oct. 16, 1963	1245	71	72.1
Nov. 19, 1963	0825	51	76.1
Dec. 19, 1963	1655	33	86.8
Jan. 28, 1964	1540	42	79.8
June 18, 1964	1620	77	136
July 29, 1964	1700	80	76.1
Sept. 3, 1964	1400	84	49.8
Oct. 7, 1964	1315	61	95.2
Nov. 5, 1964	1320	64	77.0
Dec. 16, 1964	1710	44	205
Jan. 15, 1965	0915	37	281
Feb. 13, 1965	1120	41	2,280
Mar. 24, 1965	1400	45	233
Apr. 28, 1965	1555	60	244
June 3, 1965	1005	73	221
July 6, 1965	1635	82	169
Aug. 4, 1965	1015	74	111
Sept. 2, 1965	0830	68	166
Oct. 6, 1965	1000	60	269
Nov. 9, 1965	1240	58	150
Dec. 14, 1965	1530	50	138
Jan. 13, 1966	1000	38	402
Mar. 26, 1966	1215	65	1,370
Apr. 27, 1966	1030	65	2,400
June 9, 1966	0700	73	347
July 12, 1966	1345	84	185
Aug. 17, 1966	1800	80	159
Sept. 22, 1966	0930	62	116
Oct. 26, 1966	0955	53	118
Nov. 29, 1966	1420	45	132
Jan. 12, 1967	1405	40	183
Feb. 9, 1967	1050	41	242
Mar. 22, 1967	1500	61	249
Apr. 25, 1967	1410	61	160
May 31, 1967	0825	69	237
Aug. 30, 1967	1700	75	90.0
Oct. 10, 1967	1450	57	75.2
Dec. 6, 1967	0950	49	443
Jan. 25, 1968	0950	41	254
Mar. 19, 1968	1335	57	239
May 15, 1968	1530	73	828
Aug. 7, 1968	0935	78	175
Oct. 9, 1968	1000	60	105
Dec. 6, 1968	1125	40	328
Jan. 24, 1969	0855	48	899
Mar. 11, 1969	1320	49	281
Apr. 16, 1969	0940	62	490
May 20, 1969	1155	68	320
July 24, 1969	1050	77	113
Sept. 23, 1969	1505	74	63.6

ST. FRANCIS RIVER BASIN

7-0430. Castor River at Aquilla, Mo.

Location.--Lat 36°57'10", long 89°54'25", in NE¼SE¼ sec.25, T.27 N., R.10 E., on downstream side of right pier of bridge on State Highway 25, half a mile north of Aquilla, and 4 miles north of Bloomfield.

Drainage area.--175 sq mi.

Discharge records available.--October 1945 to September 1969. Prior to January 1946 monthly discharge only, published in WSP 1311.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 11, 1946	1335	56	9.51
June 29, 1946	0600	76	9.45
Aug. 8, 1946	1250	78	7.49
Oct. 14, 1946	0810	58	0.27
Nov. 15, 1946	0740	50	53.6
Dec. 18, 1946	0810	43	108
Mar. 3, 1947	1115	39	10.2
Apr. 4, 1947	1350	57	70.1
May 10, 1947	0715	59	27.5
Aug. 1, 1947	1540	82	2.62
Sept. 5, 1947	1315	76	7.38
Dec. 1, 1947	1300	39	8.68
Apr. 10, 1948	0945	62	41.6
May 21, 1948	1240	70	32.9
May 23, 1948	1430	78	9.57
Aug. 5, 1948	1350	71	3.36
Apr. 21, 1949	0905	57	22.7
June 8, 1949	1015	74	41.8
July 13, 1949	1500	78	70.0
Aug. 23, 1949	1125	75	3.10
Oct. 2, 1949	1015	63	1.67
Nov. 8, 1949	1245	53	5.21
Oct. 15, 1950	1045	62	9.60
Mar. 26, 1951	1440	53	55.3
May 10, 1951	1440	69	24.5
June 29, 1951	1200	64	56.0
Dec. 18, 1951	1600	33	98.8
July 16, 1952	1325	88	43.8
Aug. 28, 1952	0745	68	3.65
Jan. 14, 1953	0735	41	18.6
Feb. 25, 1953	1155	45	48.6
Apr. 8, 1953	1025	57	26.6
Aug. 13, 1953	1125	78	2.14
Jan. 28, 1954	1220	42	23.2
Feb. 14, 1961	1530	44	95.3
Apr. 25, 1961	1345	69	49.7
Aug. 30, 1961	1535	79	3.40
Nov. 1, 1961	0800	62	.89
Aug. 22, 1962	0800	75	9.49
Nov. 1, 1962	1145	55	4.40
Feb. 13, 1963	0825	38	5.13
Apr. 24, 1963	0840	62	5.88
Aug. 8, 1963	1130	83	6.92
Sept. 10, 1963	0955	74	7.12
Oct. 16, 1963	0755	64	.31
Nov. 19, 1963	1010	51	.88
Dec. 18, 1963	1250	33	4.20
Jan. 29, 1964	1020	38	11.6
Mar. 4, 1964	0710	49	27.1
July 29, 1964	1045	81	7.09
Sept. 3, 1964	0920	74	2.40
Oct. 7, 1964	0900	54	8.14
Dec. 16, 1964	1215	41	.20
Jan. 13, 1965	1230	35	176
Feb. 12, 1965	1130	35	1,980
Mar. 24, 1965	0850	43	13.8
Apr. 29, 1965	1210	61	20.5
June 3, 1965	1415	74	15.4
July 7, 1965	1345	77	41.1
Aug. 4, 1965	1330	80	9.10
Sept. 2, 1965	1430	68	2.80
Dec. 15, 1965	1030	47	57.4
Jan. 14, 1966	1400	36	39.8
Mar. 23, 1966	1125	59	18.9
Apr. 26, 1966	1730	64	1,650
June 7, 1966	1310	74	13.1
July 13, 1966	0755	79	.82
Aug. 18, 1966	0950	78	21.0
Sept. 21, 1966	1340	62	1.14
Oct. 26, 1966	1425	50	3.04
Nov. 30, 1966	1025	46	207
Jan. 11, 1967	1450	34	24.2
Feb. 9, 1967	1645	37	57.4
Mar. 23, 1967	0950	53	22.1
Apr. 26, 1967	1000	58	13.6
May 31, 1967	1200	71	14.9
Oct. 11, 1967	0905	51	.88
Dec. 6, 1967	1445	44	553
Jan. 24, 1968	1100	32	104
Mar. 19, 1968	0910	52	63.9
Mar. 21, 1968	0710	45	1,820
May 15, 1968	0900	66	762
July 10, 1968	1035	75	63.1
Aug. 20, 1968	1100	78	21.2
Sept. 11, 1968	1340	82	1.50
Oct. 16, 1968	1540	64	1.80
Dec. 12, 1968	0725	39	20.8
Mar 12, 1969	1015	39	61.7
Apr. 16, 1969	1430	64	452
May 21, 1969	0915	66	122
July 23, 1969	1455	79	.81
Sept. 24, 1969	0920	64	1.23

ST. FRANCIS RIVER BASIN

7-0435. Little River ditch 1 near Morehouse, Mo.

Location.--Lat 36°50'05", long 89°43'50", in SW¼SE¼ sec.2, T.25 N., R.12 E., on downstream side of second pier right of left abutment of bridge on State Highway 114, 1½ miles downstream from Little River ditch 39, and 2 miles west of Morehouse.

Drainage area.--450 sq mi.

Discharge records available.--October 1945 to September 1969.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
June 29, 1946	0905	80	121
Oct. 14, 1946	1120	59	51.3
Nov. 13, 1946	0830	48	261
Dec. 18, 1946	1105	44	406
Jan. 24, 1947	1600	46	327
Jan. 25, 1947	0655	48	306
June 20, 1947	1245	73	145
Aug. 2, 1947	1145	88	90.3
Sept. 6, 1947	1310	77	69.5
Oct. 13, 1947	0810	68	62.4
Dec. 1, 1947	1530	46	153
Jan. 9, 1948	1520	46	615
Apr. 11, 1948	0830	54	274
May 21, 1948	1540	73	236
June 24, 1948	0715	76	104
Aug. 6, 1948	0825	70	62.1
Apr. 21, 1949	1200	60	195
June 8, 1949	1335	77	331
July 13, 1949	1715	78	306
Aug. 23, 1949	1400	85	86.7
Oct. 2, 1949	1135	64	63.5
Nov. 8, 1949	1610	57	174
June 14, 1950	0630	54	235
July 26, 1950	1720	68	199
Aug. 30, 1950	1345	80	436
Oct. 15, 1950	1500	70	127
Jan. 8, 1951	0900	37	581
Mar. 26, 1951	1710	66	355
May 10, 1951	1640	69	207
July 16, 1952	1610	76	109
Aug. 28, 1952	1050	82	107
Jan. 14, 1953	1230	43	147
Apr. 8, 1953	1210	52	267
July 16, 1953	0740	74	80.5
Aug. 13, 1953	1340	89	57.2
Sept. 24, 1953	0930	66	29.1
Dec. 21, 1953	0830	41	58.5
Jan. 28, 1954	1445	46	143
May 16, 1954	0845	69	153
Feb. 15, 1961	0645	49	317
Nov. 1, 1961	0915	61	78.9
Aug. 22, 1962	1020	76	74.2
Nov. 1, 1962	0935	55	125
Dec. 4, 1962	1150	52	101
Feb. 13, 1963	1215	42	113
Apr. 24, 1963	1445	69	141
Aug. 3, 1963	0855	78	104
Sept. 10, 1963	1050	80	118
Oct. 16, 1963	1030	68	83.6
Nov. 19, 1963	0920	51	84.5
Jan. 28, 1964	1650	42	110
June 19, 1964	1245	79	147
Sept. 3, 1964	1145	81	67.6
Oct. 7, 1964	1130	60	112
Oct. 16, 1964	1515	46	329
Nov. 5, 1964	1530	63	91.1
Jan. 13, 1965	1530	47	555
Feb. 12, 1965	1500	45	5,250
Apr. 29, 1965	0830	57	234
May [illegible], 1965	1235	43	200
June [illegible], 1965	1215	76	189
July 7, 1965	1210	80	248
Aug. 4, 1965	1200	78	102
Sept. 2, 1965	1050	74	78.6
Oct. 6, 1965	1215	61	303
Nov. 9, 1965	1030	57	129
Jan. 14, 1966	0900	34	366
Mar. 23, 1966	1440	61	215
Apr. 26, 1966	1445	65	3,640
Apr. 27, 1966	0815	64	5,300
June 7, 1966	1520	76	216
July 12, 1966	1600	86	116
Aug. 18, 1966	0905	77	178
Sept. 21, 1966	1540	64	90.7
Oct. 26, 1966	1205	55	124
Jan. 12, 1967	1630	44	226
Feb. 9, 1967	1450	46	312
Mar. 23, 1967	0815	54	233
Apr. 25, 1967	1620	61	161
May 17, 1967	1225	64	3,160
May 31, 1967	1045	69	204
Aug. 31, 1967	0930	60	81.0
Oct. 10, 1967	1700	59	76.3
Dec. 6, 1967	1210	44	1,190
Jan. 24, 1968	1315	41	378
Mar. 19, 1968	1120	56	276
Mar. 21, 1968	1920	43	5,110
May 14, 1968	1510	68	2,380
Aug. 20, 1968	0850	77	157
Sept. 11, 1968	1140	68	91.0
Oct. 16, 1968	1500	64	129
Dec. 11, 1968	1525	48	241
Mar. 11, 1969	1555	50	267
May 20, 1969	1515	68	1,340
July 23, 1969	1655	80	181
Sept. 23, 1969	1720	76	66.3

ST. FRANCIS RIVER BASIN

7-0440. Little River ditch 251 near Kennett, Mo.

Location.--Lat 36°14'10", long 89°58'40", in NW¼ sec.3, T.18 N., R.10 E., on downstream side of bridge on State Highway 84, 4 miles east of Kennett.

Drainage area.--883 sq mi, includes that of Little River ditches 66 and 66-A.

Discharge records available.--November 1926 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 9, 1946	1000	76	398
Oct. 15, 1946	1450	63	175
Nov. 14, 1946	1025	51	458
Mar. 4, 1947	1540	44	346
Apr. 6, 1947	1010	53	496
June 21, 1947	1720	75	468
Aug. 3, 1947	1055	80	321
Sept. 8, 1947	0950	78	202
Oct. 14, 1947	0820	76	163
Dec. 2, 1947	1345	42	346
May 22, 1948	1020	77	541
June 24, 1948	1440	77	399
Aug. 9, 1948	1250	86	246
Aug. 24, 1949	1530	80	357
Oct. 3, 1949	0855	57	246
Nov. 9, 1949	1400	53	515
Oct. 16, 1950	1440	71	334
Nov. 16, 1950	1210	47	605
May 11, 1951	1135	70	525
Aug. 11, 1951	1000	80	420
July 18, 1952	0910	76	335
Aug. 29, 1952	0900	80	229
Jan. 15, 1953	0820	44	299
Feb. 26, 1953	0900	47	531
Apr. 9, 1953	0740	62	555
July 16, 1953	1540	69	279
Sept. 25, 1953	0910	58	87.8
Dec. 20, 1953	1340	37	143
Jan. 29, 1954	1145	45	374
May 16, 1954	1710	74	396
Aug. 30, 1961	0850	80	263
Nov. 1, 1961	1245	71	202
Aug. 22, 1962	1435	78	220
Oct. 31, 1962	1225	55	406
Dec. 4, 1962	0835	54	312
Feb. 13, 1963	1700	37	294
Apr. 25, 1963	1005	64	336
Aug. 8, 1963	1730	87	252
Sept. 10, 1963	1530	84	254
Oct. 16, 1963	1535	71	177
Nov. 18, 1963	1520	59	199
Dec. 19, 1963	1100	33	173
Jan. 28, 1964	1245	38	224
June 18, 1964	0900	76	323
Oct. 8, 1964	0940	58	259
Nov. 5, 1964	0750	61	189
Mar. 24, 1965	1145	41	571
Apr. 28, 1965	1300	60	638
June 2, 1965	1510	76	580
July 6, 1965	1155	82	881
Aug. 3, 1965	1435	49	275
Sept. 1, 1965	1435	76	302
Nov. 9, 1965	1555	58	85.4
Dec. 14, 1965	1305	49	134
Jan. 11, 1966	1550	44	733
Feb. 18, 1966	0850	43	571
Mar. 24, 1966	1415	53	204
Apr. 25, 1966	1645	65	2,760
Apr. 27, 1966	1225	65	3,320
June 8, 1966	0915	77	367
July 12, 1966	0935	87	130
Sept. 23, 1966	0850	65	88.9
Oct. 25, 1966	1150	58	97.6
Nov. 29, 1966	0955	44	290
Jan. 12, 1967	1000	40	169
Feb. 8, 1967	1710	35	314
Mar. 22, 1967	1355	59	226
Apr. 25, 1967	0905	59	157
May 16, 1967	1640	65	3,900
May 30, 1967	1345	76	251
Aug. 30, 1967	1350	75	75.8
Oct. 10, 1967	1035	60	64.9
Jan. 25, 1968	1605	39	386
Mar. 19, 1968	1610	56	264
June 25, 1968	1545	78	166
Aug. 6, 1968	1520	84	317
Oct. 8, 1968	1540	64	84.3
Mar. 11, 1969	1005	42	260
Sept. 23, 1969	1155	76	21.8

ST. FRANCIS RIVER BASIN

7-0450. Little River ditch 66 near Kennett, Mo.

Location.--Lat 36°14'10", long 89°58'45", in NE¼ sec.4, T.18 N., R.10 E., on downstream side of bridge on State Highway 84, 4 miles east of Kennett.

Drainage area.--Included in Little River ditch 251.

Discharge records available.--October 1926 to September 1969.

Maximum temperature measured.--89° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 31, 1945	1320	81	19.4
Oct. 12, 1945	0910	59	106
Apr. 13, 1946	0950	63	75.2
June 30, 1946	0940	82	62.6
Aug. 9, 1946	0915	89	69.9
Oct. 15, 1946	1420	71	3.37
Nov. 14, 1946	1245	54	77.6
Dec. 19, 1946	0920	43	199
Jan. 25, 1947	1515	49	217
Mar. 4, 1947	1440	47	47.6
Apr. 5, 1947	1640	63	83.2
June 21, 1947	1630	76	76.4
Aug. 3, 1947	0950	80	22.9
Sept. 8, 1947	1055	84	.24
Dec. 2, 1947	1425	45	37.9
May 22, 1948	0915	78	93.1
June 24, 1948	1550	78	43.6
Aug. 9, 1948	1420	86	7.70
Apr. 22, 1949	0805	61	116
June 9, 1949	0940	76	157
July 14, 1949	1410	82	147
Aug. 24, 1949	1700	80	25.8
Oct. 2, 1949	1730	57	8.64
Nov. 9, 1949	1540	58	46.8
June 14, 1950	1550	64	116
July 27, 1950	1310	76	62.0
Aug. 31, 1950	1230	65	90.4
Oct. 16, 1950	1610	75	14.7
Nov. 16, 1950	1030	54	70.5
Mar. 28, 1951	0845	54	163
May 11, 1951	1030	71	73.5
Aug. 11, 1951	0920	82	42.8
Aug. 28, 1952	1610	88	.73
Jan 15, 1953	0920	43	17.8
Feb. 26, 1953	1010	47	59.6
Apr. 9, 1953	0910	66	79.5
July 16, 1953	0515	70	3.81
Jan. 29, 1954	1300	47	25.2
May 16, 1954	1640	77	29.1
Feb. 15, 1961	1120	55	33.2
Apr. 26, 1961	0855	67	120
Oct. 31, 1962	1150	60	2.62
Mar. 13, 1964	1130	50	2,320
Jan. 12, 1965	0825	39	199
June 2, 1965	1745	79	2.45
Aug. 3, 1965	1315	80	3.14
Oct. 5, 1965	1115	59	24.8
Nov. 9, 1965	1630	57	244
Dec. 14, 1965	1125	49	325
Feb. 18, 1966	1125	42	739
Mar. 24, 1966	1150	53	346
Apr. 26, 1966	0955	65	4,150
June 8, 1966	1005	74	908
July 12, 1966	0815	86	260
Sept. 22, 1966	1530	71	180
Oct. 25, 1966	1305	69	187
Nov. 29, 1966	1205	46	522
Jan. 12, 1967	0910	35	272
Feb. 8, 1967	1600	36	553
Mar. 22, 1967	1245	59	389
Apr. 25, 1967	0810	59	251
May 16, 1967	1645	65	7,110
May 30, 1967	1310	76	393
Aug. 30, 1967	1250	75	156
Oct. 10, 1967	0850	57	143
Jan. 25, 1968	1440	40	489
Mar. 13, 1968	1100	39	407
Mar. 22, 1968	1300	42	6,470
May 15, 1968	1115	68	3,390
June 25, 1968	1500	78	312
Aug. 6, 1968	1400	86	562
Oct. 8, 1968	1435	64	177
Dec, 6, 1968	0925	37	814
Jan. 23, 1969	1220	44	2,140
Mar. 11, 1969	0910	41	470
May 19, 1969	1905	68	502
July 24, 1969	1535	89	244
Sept. 23, 1969	1100	74	135

ST. FRANCIS RIVER BASIN

7-0460. Little River ditch 259 near Kennett, Mo.

Location.--Lat 36°14'10", long 89°58'35", in NW¼ sec.3, T.18 N., R.10 E., on downstream side of bridge on State Highway 84, 4 miles east of Kennett.

Drainage area.--89.0 sq mi.

Discharge records available.--November 1926 to September 1969.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 13, 1946	1155	64	29.3
June 30, 1946	1500	77	21.5
Oct. 15, 1946	1600	66	2.71
Nov. 14, 1946	0920	54	11.7
Mar. 4, 1947	1655	46	10.1
Apr. 5, 1947	1525	64	15.4
Sept. 8, 1947	0900	77	4.50
Dec. 2, 1947	1225	47	6.90
Apr. 11, 1948	1505	64	44.2
June 24, 1948	1245	77	21.2
Aug. 9, 1948	1100	88	2.30
Apr. 21, 1949	1620	61	24.4
July 14, 1949	1205	81	16.2
Aug. 24, 1949	1040	80	52.8
Oct. 3, 1949	0940	59	4.43
Nov. 9, 1949	1450	58	17.8
Oct. 16, 1950	1350	77	7.90
Jan. 9, 1951	1125	38	65.5
May 11, 1951	1225	71	26.7
Aug. 11, 1951	1150	83	14.8
Dec. 19, 1951	1200	40	63.8
Aug. 28, 1953	1535	86	3.14
Apr. 9, 1953	0650	63	23.6
Aug. 14, 1953	0830	87	6.50
Dec. 18, 1953	0700	33	9.68
Jan. 29, 1954	1600	46	34.7
Mar. 16, 1961	1515	58	102
Apr. 26, 1961	0820	62	44.3
Aug. 30, 1961	0950	80	7.08
Nov. 1, 1961	1215	74	5.67
Apr. 5, 1961	0930	57	60.7
Aug. 22, 1962	1720	78	7.38
Oct. 31, 1962	1400	55	9.41
Feb. 13, 1963	1550	50	6.80
Apr. 25, 1963	0910	63	11.5
Sept. 10, 1963	1510	88	6.90
Oct. 16, 1963	1450	73	5.09
Nov. 18, 1963	1550	59	6.71
Dec. 19, 1963	0945	34	6.01
Jan. 28, 1964	1315	40	6.41
June 17, 1964	1640	77	17.5
Sept. 3, 1964	1610	84	13.0
Oct. 8, 1964	0740	55	14.1
Nov. 4, 1964	1630	64	9.90
Dec. 17, 1964	1145	41	39.4
Jan. 12, 1965	0815	37	1,420
Feb. 14, 1965	0850	41	1,230
Mar. 25, 1965	1100	44	30.1
Apr. 28, 1965	1250	63	29.6
June 2, 1965	1330	78	272
Aug. 3, 1965	1635	80	18.6
Nov. 9, 1965	1445	57	23.1
Dec. 14, 1965	0935	51	23.5
Jan. 11, 1966	1145	45	119
Feb. 17, 1966	1445	49	127
Mar. 24, 1966	1525	58	55.3
Apr. 25, 1966	1410	65	698
Apr. 27, 1966	1130	65	2,120
July 12, 1966	1055	81	21.5
Sept. 23, 1966	0935	67	18.1
Nov. 29, 1966	0850	43	18.7
Jan. 12, 1967	1150	40	21.1
Feb. 9, 1967	0830	41	26.4
Mar. 22, 1967	1400	67	30.5
Apr. 25, 1967	1015	59	28.4
May 16, 1967	1640	65	2,860
May 30, 1967	0840	77	45.1
Aug. 30, 1967	1440	75	15.5
Oct. 10, 1967	1155	50	13.8
Dec. 5, 1967	1500	48	193
Jan. 25, 1968	1655	44	64.5
Mar. 19, 1968	1700	58	33.4
May 15, 1968	1210	73	1,740
Aug. 6, 1968	1015	84	24.8
Oct. 8, 1968	1625	70	18.2
Dec. 5, 1968	1520	43	121
Jan. 23, 1969	0915	50	172
Mar. 11, 1969	1100	50	34.3
May 20, 1969	1020	66	38.9
July 24, 1969	1725	84	75.0
Sept. 23, 1969	1255	70	11.9

WHITE RIVER BASIN

7-0507. James River near Springfield, Mo.

Location.--Lat 37°12'12", long 93°09'00", in NE¼NW¼ sec.11, T.28 N., R.21 W., on left bank on county road at Kinser bridge, 2½ miles southeast of Springfield.

Drainage area.--246 sq mi.

Discharge records available.--October 1955 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 26, 1956	0745	62	6.12				
Aug. 7, 1961	1035	75	40.0				
Dec. 4, 1961	1025	52	21.4				
Jan. 11, 1962	1600	34	101				
July 12, 1962	1130	78	13.1				
Aug. 13, 1962	1610	80	3.25				
Apr. 2, 1963	0920	63	70.3				
May 7, 1963	1105	61	172				
June 10, 1963	1610	80	105				
Oct. 29, 1963	1420	62	4.98				
Dec. 2, 1963	1050	42	9.50				
Feb. 10, 1964	1100	45	12.3				
Mar. 17, 1964	1115	50	69.1				
Apr. 20, 1964	1635	68	79.6				
May 25, 1964	1000	72	23.9				
July 10, 1964	0935	72	48.5				
Aug. 10, 1964	1030	79	5.09				
Sept. 15, 1964	0745	70	4.63				
Oct. 6, 1964	1420	61	4.95				
Nov. 9, 1964	1230	60	9.81				
Dec. 15, 1964	0915	39	17.3				
Jan. 18, 1965	1600	33	61.8				
Feb. 16, 1965	0920	42	114				
Mar. 29, 1965	1440	49	93.8				
May 29, 1965	0910	68	74.0				
July 6, 1965	1410	71	208				
Aug. 13, 1965	1000	73	28.9				
Sept. 7, 1965	1500	72	573				
Oct. 11, 1965	1340	58	68.1				
Nov. 26, 1965	1225	56	28.0				
Feb. 6, 1966	0820	42	332				
Mar. 23, 1966	1040	53	196				
May 4, 1966	0845	58	319				
June 17, 1966	1025	68	60.3				
July 14, 1966	0845	82	14.4				
July 29, 1966	1000	75	31.4				
Sept. 1, 1966	0950	73	16.7				
Oct. 4, 1966	1700	64	87.7				
Nov. 14, 1966	1235	49	119				
Dec. 15, 1966	1050	40	101				
Jan. 18, 1967	1230	34	73.6				
Mar. 17, 1967	1245	46	195				
June 16, 1967	1345	74	50.8				
July 14, 1967	1130	67	84.5				
Aug. 8, 1967	0840	75	34.8				
Sept. 12, 1967	0830	65	10.5				
Oct. 9, 1967	1430	59	425				
Dec. 11, 1967	1630	49	1,650				
Feb. 5, 1968	1730	49	827				
May 17, 1968	1600	63	131				
July 15, 1968	1515	78	41.0				
Aug. 12, 1968	1435	68	45.9				
Sept. 23, 1968	1230	69	15.1				
Nov. 20, 1968	1500	48	394				
Jan. 10, 1969	1030	37	256				
Feb. 11, 1969	1100	46	296				
Mar. 10, 1969	1245	40	160				
Apr. 29, 1969	1110	53	344				
June 3, 1969	1625	66	61.9				

WHITE RIVER BASIN

7-0507.5. James River near Nixa, Mo.

LOCATION.--Lat 37°06'13", long 93°15'49", in SE¼NE¼ sec.30, T.28 N., R.21 W., Greene County, temperature recorder at gaging station on left bank, 0.5 mile downstream from Springfield Utilities Dam, and 4.5 miles northeast of Nixa.

DRAINAGE AREA.--273 sq mi.

DISCHARGE RECORDS AVAILABLE.--January 1956 to September 1969, below 100 cfs available in file of U. S. Geological Survey.

TEMPERATURE RECORDS AVAILABLE.--November 1966 to September 1969, continuous ethyl alcohol-actuated thermograph. Prior to November 1966, occasional temperature observations.

MAXIMUM TEMPERATURE MEASURED.--100° Fahrenheit.

TEMPERATURE (°F) OF WATER, WATER YEAR NOVEMBER 1966 TO SEPTEMBER 1967

	DAY																														
MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	21	AVERAGE
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	62	61	61	61	63	63	62	63	65	65	64	63	64	64	58	55	56	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	61	59	59	60	61	62	61	60	62	63	63	63	63	58	54	53	53	--	--
DECEMBER																																
MAXIMUM	57	56	55	53	54	57	59	60	60	60	55	54	53	53	52	54	54	55	55	55	57	56	54	51	52	53	51	51	47	47	47	54
MINIMUM	54	54	53	51	51	54	57	57	58	52	52	52	51	51	50	51	51	52	52	53	53	54	49	49	48	50	50	47	45	45	47	51
JANUARY																																
MAXIMUM	47	48	48	48	50	50	48	45	46	47	50	50	50	51	50	51	50	51	50	52	53	55	58	59	59	59	54	51	48	50	52	50
MINIMUM	45	45	45	46	46	48	45	44	45	45	45	49	49	49	48	48	48	48	49	49	50	51	53	57	55	54	51	47	47	47	48	48
FEBRUARY																																
MAXIMUM	54	54	51	48	49	49	48	48	49	49	51	52	53	54	54	54	55	54	54	53	54	53	52	50	53	51	50	54	--	--	--	51
MINIMUM	52	50	48	47	48	48	47	46	46	47	49	50	50	52	52	52	53	50	50	50	50	50	49	48	48	49	48	49	--	--	--	49
MARCH																																
MAXIMUM	56	55	57	59	56	54	50	--	--	--	--	--	63	65	64	59	57	57	53	51	52	54	57	59	60	60	64	66	67	66	67	58
MINIMUM	52	53	55	56	54	50	47	--	--	--	--	--	59	61	57	54	55	53	51	48	49	51	54	56	59	58	58	61	63	65	66	55
APRIL																																
MAXIMUM	68	67	67	69	68	69	72	72	72	70	72	70	67	66	63	66	66	69	68	67	66	68	68	65	65	63	64	61	61	61	--	67
MINIMUM	66	66	66	64	65	66	66	68	68	68	68	67	66	62	62	63	64	65	65	64	65	64	61	61	62	58	58	58	60	60	--	63
MAY																																
MAXIMUM	63	64	65	65	65	65	61	64	66	67	72	72	69	68	58	60	65	65	69	70	67	68	69	72	76	78	78	79	80	80	77	68
MINIMUM	61	63	63	62	64	61	61	61	64	65	66	69	67	57	57	58	60	63	65	66	63	64	66	67	70	73	74	76	76	77	76	65
JUNE																																
MAXIMUM	77	76	78	78	79	81	83	85	86	85	83	83	86	89	90	91	87	89	91	88	90	91	90	87	84	82	78	79	81	80	--	84
MINIMUM	75	74	73	73	73	76	78	79	80	81	79	80	80	82	84	85	84	83	83	84	85	83	83	84	82	78	75	76	77	78	--	79
JULY																																
MAXIMUM	78	78	78	78	78	77	76	76	78	84	85	87	86	85	86	81	82	82	86	88	89	86	89	90	87	93	91	91	92	93	93	84
MINIMUM	75	75	76	76	75	73	74	73	75	77	81	83	82	80	79	79	77	78	79	81	81	83	83	83	85	85	86	85	84	84	84	79
AUGUST																																
MAXIMUM	90	94	93	94	93	86	92	88	85	87	84	86	87	87	88	90	88	88	87	86	87	78	87	92	86	85	90	92	91	81	82	87
MINIMUM	85	86	89	88	85	83	82	84	81	77	74	71	70	70	71	73	73	73	72	67	68	70	71	69	67	68	64	59	63	71	66	73
SEPTEMBER																																
MAXIMUM	82	85	80	70	76	77	70	81	90	84	87	85	80	75	70	76	76	76	78	76	78	78	78	77	78	78	74	70	73	75	--	77
MINIMUM	60	63	61	65	64	66	67	66	65	64	64	65	69	69	66	68	64	74	74	74	74	73	72	71	70	72	70	66	64	63	--	67

7-0507.5. James River near Nixa, Mo.--Continued

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	1	22	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVER-AGE
OCTOBER																																
MAXIMUM	76	77	79	81	84	77	77	71	65	64	62	64	64	65	65	64	63	59	60	61	61	61	62	62	61	61	61	60	60	60	56	66
MINIMUM	65	66	67	70	73	75	72	64	63	61	61	60	62	62	64	63	59	58	59	59	60	59	60	61	61	61	59	59	60	55	55	62
NOVEMBER																																
MAXIMUM	56	55	55	54	52	52	52	52	53	57	57	59	61	60	59	58	58	57	57	59	58	59	58	56	56	56	58	55	55	55	--	56
MINIMUM	55	55	54	52	51	51	52	52	52	53	56	57	58	55	57	57	56	56	56	57	56	57	56	54	54	55	55	53	53	51	—	54
DECEMBER																																
MAXIMUM	53	52	50	51	52	51	50	52	54	53	51	49	49	49	47	46	46	49	50	51	52	49	46	47	48	48	47	47	47	46	46	49
MINIMUM	51	48	49	49	49	48	48	50	50	51	48	47	49	47	46	45	46	46	48	50	49	46	45	45	47	47	46	46	45	45	45	47
JANUARY																																
MAXIMUM	45	44	44	45	44	44	43	43	46	46	45	46	46	46	46	46	48	48	50	49	50	51	53	51	50	52	52	51	50	50	49	48
MINIMUM	44	43	44	44	43	42	42	42	43	45	45	45	46	45	45	45	45	47	47	47	48	48	51	48	47	49	50	46	47	47	47	46
FEBRUARY																																
MAXIMUM	50	48	45	47	48	48	48	46	45	47	47	44	45	44	45	45	48	46	46	49	49	48	47	47	47	48	49	52	52	--	—	47
MINIMUM	49	45	45	45	47	47	46	45	45	45	44	44	44	44	44	44	45	45	45	45	47	46	46	46	47	47	47	47	48	--	—	46
MARCH																																
MAXIMUM	50	53	53	52	52	56	57	58	57	60	58	54	53	53	52	49	50	53	54	54	49	47	47	48	52	57	57	59	61	62	63	54
MINIMUM	48	48	49	48	49	51	54	55	56	57	54	50	49	50	49	45	47	50	53	49	46	46	46	46	48	52	55	57	59	61	62	51
APRIL																																
MAXIMUM	62	60	59	57	52	54	56	58	61	61	61	63	64	64	64	64	68	67	68	68	64	64	63	60	62	62	65	63	65	66	—	62
MINIMUM	60	58	59	52	51	52	53	56	58	59	60	61	62	62	61	62	63	65	67	64	63	62	59	59	60	60	62	62	62	64	—	60
MAY																																
MAXIMUM	68	71	71	72	73	72	70	71	72	71	71	68	70	70	73	75	76	73	72	71	72	68	69	72	72	68	64	65	68	70	70	71
MINIMUM	65	67	69	68	69	69	68	67	68	70	67	65	67	66	70	71	72	70	68	68	68	68	68	68	68	64	62	63	65	67	69	68
JUNE																																
MAXIMUM	70	72	72	76	77	79	82	80	82	85	87	88	88	89	88	86	89	88	89	90	92	92	90	85	85	82	82	84	86	85	—	84
MINIMUM	68	68	68	70	73	74	76	77	77	78	81	81	81	81	82	82	81	80	80	82	83	84	84	84	82	78	75	75	78	79	—	78
JULY																																
MAXIMUM	83	85	85	82	84	85	86	90	92	93	95	92	93	92	92	93	92	95	96	96	91	96	94	88	86	95	97	84	92	88	89	90
MINIMUM	79	79	78	77	76	78	80	80	82	83	84	84	84	84	85	84	84	84	82	79	79	80	80	79	80	79	78	80	80	83	85	81
AUGUST																																
MAXIMUM	89	89	93	94	94	96	96	97	93	91	89	84	86	88	89	92	91	92	92	96	96	94	96	84	91	93	94	85	77	75	85	90
MINIMUM	83	82	83	84	85	85	82	82	82	80	84	82	82	82	83	83	84	84	84	84	83	82	81	80	78	74	76	75	74	74	75	81
SEPTEMBER																																
MAXIMUM	87	89	87	79	87	90	93	86	77	86	89	89	89	86	70	76	78	79	86	88	89	79	88	79	85	86	89	89	89	88	—	85
MINIMUM	72	72	74	74	74	69	69	71	68	65	63	62	62	63	67	69	72	72	72	72	75	76	76	77	76	73	72	72	72	70	—	71

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVER-AGE
OCTOBER																																
MAXIMUM	86	86	80	84	67	75	80	83	72	71	70	69	69	74	76	77	72	72	73	72	71	70	68	68	70	71	64	64	68	72	72	73
MINIMUM	71	72	66	62	65	66	65	66	68	67	65	66	66	68	71	71	69	67	66	65	66	65	65	63	60	60	61	58	58	59	61	65
NOVEMBER																																
MAXIMUM	67	67	67	56	56	55	55	54	54	54	53	52	52	54	54	51	50	50	49	48	49	53	52	53	55	55	55	50	47	46	—	54
MINIMUM	64	65	56	53	53	54	54	53	53	53	51	50	51	51	51	50	50	49	48	47	48	49	50	52	52	53	50	47	46	45	—	52
DECEMBER																																
MAXIMUM	46	48	49	48	48	48	48	47	47	46	48	50	49	48	47	48	49	51	47	49	51	51	47	46	46	46	48	44	41	43	43	47
MINIMUM	46	46	48	46	47	47	46	46	46	44	45	48	48	47	46	45	48	47	46	46	49	46	46	44	45	45	43	41	41	41	41	46
JANUARY																																
MAXIMUM	41	41	43	43	41	42	45	45	45	45	45	44	46	46	46	48	47	45	45	45	46	50	50	48	45	45	43	43	45	44	44	45
MINIMUM	40	40	41	41	41	41	42	44	43	43	43	43	43	44	46	46	45	45	43	44	44	46	48	44	44	40	42	43	41	43	44	43
FEBRUARY																																
MAXIMUM	45	46	47	46	47	48	50	50	49	48	48	49	49	48	46	45	49	47	50	50	49	48	47	46	47	48	48	47	—	—	--	48
MINIMUM	44	45	46	45	46	46	48	49	46	48	48	48	48	45	45	44	44	45	46	46	47	46	45	45	45	47	47	47	—	—	—	46
MARCH																																
MAXIMUM	49	50	51	51	51	51	52	52	49	47	48	47	51	51	52	52	54	56	58	59	61	61	59	56	47	46	47	49	49	49	49	52
MINIMUM	47	47	48	48	49	49	48	48	46	45	45	46	46	48	49	49	49	52	54	55	55	57	56	47	45	45	45	47	48	48	48	49
APRIL																																
MAXIMUM	52	57	58	60	60	58	60	60	61	63	65	64	63	61	61	64	63	62	60	61	63	66	69	65	67	67	67	64	64	66	—	63
MINIMUM	49	51	57	58	58	57	57	58	59	61	61	62	61	59	59	61	60	60	58	58	59	63	63	63	64	65	64	63	61	62	—	60
MAY																																
MAXIMUM	66	70	72	73	73	75	75	74	72	71	69	74	72	76	78	78	78	76	74	76	78	77	76	78	78	81	83	85	87	83	83	76
MINIMUM	62	64	67	70	71	71	74	71	69	68	67	66	68	70	73	74	75	74	72	72	75	75	74	74	75	74	76	76	78	80	80	72
JUNE																																
MAXIMUM	81	82	78	81	84	87	88	89	83	86	88	85	88	94	82	84	78	84	87	86	82	87	91	87	88	90	91	94	95	97	--	86
MINIMUM	78	76	75	74	75	77	78	80	80	79	79	80	79	79	76	76	75	76	76	78	79	80	82	83	86	85	86	87	88	88	--	80
JULY																																
MAXIMUM	89	90	92	95	95	94	95	96	96	96	91	98	99	100	100	97	98	96	94	85	91	91	90	89	88	93	93	88	91	92	86	93
MINIMUM	84	82	84	86	85	85	85	83	82	82	82	80	81	81	80	80	78	77	77	77	76	77	78	80	80	79	81	75	71	71	75	80
AUGUST																																
MAXIMUM	88	86	90	92	92	91	93	95	92	91	94	94	91	77	73	76	90	95	97	93	82	88	90	87	85	85	93	92	93	93	91	90
MINIMUM	73	71	71	73	75	74	72	73	74	71	71	72	71	72	71	71	71	73	73	76	74	80	74	77	77	76	74	75	73	73	71	73
SEPTEMBER																																
MAXIMUM	91	75	85	83	86	89	86	88	88	87	85	87	83	83	82	82	83	83	83	83	83	77	76	83	84	85	85	84	85	85	—	83
MINIMUM	72	73	73	79	80	82	82	81	79	76	75	76	75	75	75	80	75	75	75	73	74	74	73	69	68	69	71	70	69	69	—	75

WHITE RIVER BASIN

7-0507.5. James River near Nixa, Mo.--Continued

TEMPERATURE AND DISCHARGE

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 25, 1956	1400	64	7.07				
Jan. 30, 1961	1115	41	17.3				
Aug. 7, 1961	1205	86	46.9				
Dec. 4, 1961	1250	57	28.6				
Jan. 11, 1962	1410	38	105				
Apr. 19, 1962	0940	60	188				
July 12, 1962	1000	76	17.9				
Aug. 14, 1962	0805	72	7.09				
Feb. 26, 1963	1650	50	15.0				
Apr. 2, 1963	0735	65	75.2				
May 7, 1963	0905	71	223				
June 11, 1963	0800	82	122				
Dec. 2, 1963	1145	51	8.30				
Feb. 10, 1964	1145	52	14.2				
Mar. 17, 1964	1205	61	70.4				
Apr. 20, 1964	1730	74	91.1				
May 25, 1964	1055	80	26.4				
July 9, 1964	1445	79	47.3				
Aug. 11, 1964	1345	79	12.2				
Sept. 15, 1964	1125	73	9.31				
Oct. 6, 1964	1530	66	8.59				
Nov. 9, 1964	1405	66	8.92				
Jan. 18, 1965	1740	34	60.9				
Feb. 15, 1965	1425	47	132				
May 25, 1965	1030	76	99.5				
July 6, 1965	1135	78	241				
Aug. 13, 1965	1145	86	31.8				
Oct. 11, 1965	1525	66	73.3				
Nov. 26, 1965	0945	59	28.6				
Mar. 23, 1966	0840	65	233				
May 4, 1966	1140	64	373				
July 14, 1966	1015	86	12.6				
July 28, 1966	1720	89	42.5				
Oct. 4, 1966	1530	72	92.8				
Oct. 28, 1966	1135	65	41.8				

WHITE RIVER BASIN

7-0510.2 James River near Wilson Creek, Mo.

Location.--Lat 37°04'35", long 93°22'15", Christian County, at Nelson Mill bridge on county road, 2.5 miles southeast of town of Wilson Creek, and 2 miles upstream from Wilson Creek.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 8, 1967	1350	77	---				
Sept. 11, 1967	1250	69	17.3				
Oct. 10, 1967	1620	54	---				
Nov. 13, 1967	1500	55	308				
Dec. 18, 1967	1710	48	---				
Jan. 16, 1968	1610	42	160				
Feb. 13, 1968	1215	42	420				
Mar. 18, 1968	1700	54	---				
Apr. 15, 1968	1430	60	297				
May 14, 1968	1750	72	217				
June 24, 1968	1300	73	66.2				
July 16, 1968	1115	75	52.5				
Aug. 13, 1968	1420	73	85.2				
Sept. 27, 1968	1400	64	33.2				
Oct. 21, 1968	1345	59	73.0				
Nov. 15, 1968	1200	53	272				
Dec. 3, 1968	1045	48	819				
Jan. 9, 1969	1440	42	348				
Feb. 11, 1969	1510	48	312				
Mar. 5, 1969	0920	48	283				
Apr. 25, 1969	0900	60	227				
May 16, 1969	1040	66	137				
June 13, 1969	1015	70	65.0				
July 9, 1969	1145	80	36.0				
Aug. 15, 1969	1000	72	14.0				
Sept. 15, 1969	1145	70	23.0				

WHITE RIVER BASIN

7-0521.5. Wilson Creek below Springfield, Mo.

LOCATION.--Lat 37°09'02", long 93°22'12", in SE¼NE¼NE¼ sec.7, T.28 N., R.22 W., on left bank 800 ft downstream from southwest sewage treatment plant of Springfield and 200 ft downstream from South Creek.

DRAINAGE AREA.--47.2 sq mi.

DISCHARGE RECORDS AVAILABLE.--April 1967 to September 1969.

TEMPERATURE RECORD AVAILABLE.--April 1967 to September 1969, continuous ethyl alcohol-actuated thermograph.

MAXIMUM TEMPERATURE MEASURED.--84° Fahrenheit.

TEMPERATURE (°F) OF WATER, APRIL TO SEPTEMBER 1967

	DAY																														
MONTH	1	2	3	4	5	6			9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	67	64	65	67	67	70	68	67	67	68	69	69	66	65	63	59	64	65	64	66	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	64	60	63	60	61	65	64	61	62	62	64	63	56	57	54	56	57	59	57	61	--	--
MAY																																
MAXIMUM	66	65	64	67	65	63	65	67	67	68	71	69	65	61	62	62	—	--	--	--	--	--	--	72	73	74	73	74	73	74	71	67
MINIMUM	62	59	58	60	61	61	59	61	61	64	67	65	60	58	56	57	--	--	--	--	--	--	--	70	66	67	68	69	69	69	69	63
JUNE																																
MAXIMUM	70	70	73	75	75	76	76	78	77	77	74	74	77	78	79	78	76	79	78	77	79	78	79	76	73	72	74	75	74	73	—	75
MINIMUM	68	66	65	66	68	71	72	72	72	73	66	69	72	74	74	74	72	72	73	74	75	73	74	72	67	66	70	69	69	69	—	70
JULY																																
MAXIMUM	75	76	75	74	72	73	74	74	78	79	78	77	77	76	77	74	75	76	80	79	81	78	81	80	79	82	82	80	82	84	81	77
MINIMUM	69	70	67	70	66	65	67	69	72	73	76	74	73	70	70	73	69	71	73	74	75	76	75	76	78	76	78	77	76	76	77	72
AUGUST																																
MAXIMUM	79	82	81	82	81	79	81	81	79	80	78	78	79	78	80	81	81	80	80	80	78	79	80	80	79	78	79	77	80	77	76	79
MINIMUM	77	77	78	77	74	75	75	78	78	73	72	70	69	70	72	74	75	76	76	71	70	74	74	73	72	73	70	65	70	71	71	73
SEPTEMBER																																
MAXIMUM	75	77	75	74	75	77	76	75	77	79	76	76	77	77	72	72	72	70	71	72	71	70	71	71	71	72	70	67	68	69	—	73
MINIMUM	69	71	68	69	70	70	72	70	71	70	70	70	72	72	68	67	66	66	66	69	68	65	64	66	65	68	62	61	60	61	--	67

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	DAY																														
MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	70	69	71	73	73	72	65	64	65	64	63	67	68	69	68	62	62	62	63	64	64	65	66	67	63	63	64	64	62	63	56	66
MINIMUM	63	64	65	68	69	64	62	59	57	59	57	58	63	63	62	59	58	56	55	57	57	59	61	60	56	59	58	58	58	53	[illegible]	60
NOVEMBER																																
MAXIMUM	56	56	54	55	53	54	55	55	58	59	60	58	59	59	60	61	61	59	57	60	63	63	59	59	60	58	60	58	60	51	—	58
MINIMUM	54	53	51	50	48	48	47	47	52	55	55	52	52	52	52	54	56	54	51	54	58	58	53	54	53	53	52	52	47	46	—	52
DECEMBER																																
MAXIMUM	57	60	55	57	56	58	55	54	56	54	52	52	51	49	49	50	49	52	53	56	56	48	49	50	48	47	46	47	48	48	46	52
MINIMUM	50	53	48	49	50	52	51	49	53	50	50	50	49	47	45	47	48	49	47	50	48	46	46	46	44	42	45	45	45	46	42	48
JANUARY																																
MAXIMUM	44	49	48	48	49	49	45	46	51	52	52	51	49	49	53	56	57	57	58	60	60	58	57	57	58	59	59	53	55	53	54	53
MINIMUM	40	43	44	43	42	42	40	41	44	45	45	48	43	44	42	50	49	50	51	56	56	52	47	47	53	51	51	51	53	48	51	47
FEBRUARY																																
MAXIMUM	54	50	51	51	52	51	48	50	54	54	51	53	54	53	54	56	54	51	56	57	56	55	56	57	55	56	61	60	60	—	—	54
MINIMUM	48	47	49	48	48	46	44	43	45	48	45	45	45	47	49	47	46	48	48	51	46	48	49	51	52	51	54	54	51	--	—	48
MARCH																																
MAXIMUM	61	61	61	60	61	63	63	65	63	61	57	57	57	58	54	57	59	58	57	54	52	53	54	57	61	64	63	64	68	67	63	60
MINIMUM	54	55	49	43	55	54	55	53	56	57	53	42	47	49	48	48	52	54	[illegible]	49	48	48	47	46	50	54	55	57	57	60	56	52
APRIL																																
MAXIMUM	62	61	60	59	60	62	64	65	65	67	68	65	66	67	66	67	73	69	67	64	63	67	63	66	66	66	66	66	68	69	—	65
MINIMUM	52	56	58	52	49	51	53	53	56	58	56	58	61	59	55	59	62	65	63	60	60	59	58	56	58	62	63	62	61	62	--	58
MAY																																
MAXIMUM	70	71	68	70	70	68	68	71	69	66	64	66	69	72	70	70	68	70	69	68	71	69	70	71	70	65	67	69	70	71	70	69
MINIMUM	63	65	64	64	63	62	64	63	58	64	63	62	65	66	69	65	65	63	62	63	64	66	67	69	62	62	61	63	65	66	67	64
JUNE																																
MAXIMUM	69	72	73	75	74	75	75	75	77	77	78	76	77	78	77	77	77	78	78	79	79	80	79	76	73	73	75	77	79	78	—	76
MINIMUM	67	68	68	70	72	71	72	72	72	72	74	72	72	74	74	74	73	73	74	76	76	76	75	73	72	70	69	71	74	75	—	72
JULY																																
MAXIMUM	76	75	76	76	76	77	78	78	79	80	80	79	80	81	79	80	81	82	81	82	82	81	82	81	80	82	82	80	80	78	79	79
MINIMUM	71	71	71	70	70	73	73	73	75	75	75	76	75	76	76	77	76	78	78	78	77	76	78	79	79	80	80	76	74	73	75	75
AUGUST																																
MAXIMUM	79	80	82	83	80	83	83	81	82	79	76	73	75	77	76	78	77	80	79	81	82	82	82	80	80	79	80	77	76	76	77	79
MINIMUM	75	76	77	77	77	78	79	78	78	73	69	69	72	73	72	75	76	75	75	76	77	78	78	75	75	73	74	74	74	70	71	75
SEPTEMBER																																
MAXIMUM	76	76	77	74	78	78	77	78	76	77	78	78	78	78	76	75	71	72	75	77	78	76	77	77	75	75	76	76	76	75	—	76
MINIMUM	71	71	73	73	74	73	73	75	74	72	72	72	73	74	74	70	67	67	70	71	74	74	74	72	71	70	70	71	70	70	—	72

WHITE RIVER BASIN

7-0521.5. Wilson Creek below Springfield, Mo.--Continued

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	76	75	74	74	72	71	72	72	67	63	65	65	65	68	69	68	67	65	65	65	65	65	64	63	63	65	63	62	63	65	67	67
MINIMUM	71	69	70	68	61	65	66	63	56	54	59	62	60	64	66	66	62	59	59	58	59	63	60	57	56	57	58	55	55	57	60	61
NOVEMBER																																
MAXIMUM	67	65	54	56	56	54	53	53	52	51	50	53	53	57	57	51	51	49	51	51	53	55	54	53	53	54	50	50	48	49	--	53
MINIMUM	64	54	51	51	51	53	51	49	49	48	46	46	47	51	49	49	49	47	45	44	46	57	50	48	46	50	46	46	44	45	--	49
DECEMBER																																
MAXIMUM	48	52	50	50	49	50	47	46	48	50	53	52	48	48	46	50	54	55	52	53	53	48	52	54	49	55	55	45	47	47	43	50
MINIMUM	47	46	47	43	44	43	43	40	41	43	45	48	45	42	41	42	49	49	46	47	47	45	43	48	46	46	43	42	44	40	38	44
JANUARY																																
MAXIMUM	44	48	46	44	42	49	48	49	47	48	49	48	51	52	52	52	52	51	51	53	55	57	56	50	51	49	50	53	52	48	49	50
MINIMUM	40	41	39	39	46	44	43	43	41	42	45	44	44	47	49	48	49	48	46	46	52	54	49	44	46	47	46	50	44	46	48	46
FEBRUARY																																
MAXIMUM	50	50	50	52	50	56	56	54	53	54	57	54	53	52	52	53	54	56	56	54	55	51	50	54	56	55	53	52	--	--	--	53
MINIMUM	48	46	44	46	48	50	49	49	48	48	50	48	48	49	46	47	47	48	49	51	50	48	49	48	50	51	51	49	--	--	--	48
MARCH																																
MAXIMUM	55	55	56	57	56	56	58	54	54	53	55	55	56	56	57	59	59	61	62	61	61	62	58	49	49	53	53	54	54	55	53	56
MINIMUM	50	49	49	50	51	53	51	49	48	47	48	49	49	50	52	53	54	57	58	58	57	58	48	48	48	46	48	48	47	47	47	50
APRIL																																
MAXIMUM	59	63	62	63	60	60	64	63	69	67	67	67	61	60	67	70	65	63	66	67	67	67	67	67	67	67	64	63	67	67	--	65
MINIMUM	50	56	56	58	53	53	52	57	59	57	56	59	58	57	56	61	62	59	56	56	59	60	59	59	61	64	60	57	58	61	--	58
MAY																																
MAXIMUM	67	68	69	68	67	71	69	68	68	67	67	70	71	72	70	73	71	69	71	73	73	71	70	73	75	73	75	75	76	74	74	71
MINIMUM	62	64	65	65	65	67	68	62	62	63	61	61	65	66	68	68	69	66	67	68	70	69	67	69	69	68	70	69	70	71	70	67
JUNE																																
MAXIMUM	72	71	71	74	75	76	77	78	73	75	76	74	74	72	72	73	72	76	76	76	75	77	76	77	76	78	78	80	80	78	--	75
MINIMUM	68	65	67	67	69	70	71	71	69	70	72	72	70	68	66	66	70	70	70	72	70	70	73	71	73	74	75	76	75	74	--	70
JULY																																
MAXIMUM	79	79	80	81	80	81	80	81	82	82	81	83	84	82	83	84	84	84	84	83	81	82	83	82	81	82	82	78	80	80	80	82
MINIMUM	76	75	76	77	75	76	76	77	77	78	79	78	78	77	79	79	79	79	80	79	78	79	79	79	77	77	77	72	73	73	75	77
AUGUST																																
MAXIMUM	80	78	80	79	81	82	82	83	84	84	82	83	83	80	80	80	82	82	83	84	81	81	81	81	80	81	83	83	83	83	83	82
MINIMUM	75	74	73	70	76	76	74	77	77	73	73	75	75	75	77	76	76	74	77	78	73	76	75	76	76	78	77	77	77	78	76	75
SEPTEMBER																																
MAXIMUM	82	79	80	82	83	84	81	80	80	80	80	80	80	80	78	77	78	78	78	79	79	77	77	79	79	79	80	79	79	80	--	80
MINIMUM	76	77	77	77	78	79	72	74	74	73	74	75	75	75	72	74	73	72	73	72	73	73	75	71	70	72	74	72	71	74	--	74

WHITE RIVER BASIN

7-0521.6 Wilson Creek near Battlefield, Mo.

Location.--Lat 37°07'06", long 93°24'14", in SW¼NW¼ sec.24, T.28 N., R.23 W., on right downstream pier of bridge on county road 1.8 miles west of Battlefield, 0.4 mile upstream from McElhaney Branch.

Drainage area.--55.0 sq mi.

Discharge records available.--March 1968 to September 1969.

Maximum temperature measured.--74° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Mar. 7, 1968	1515	56	53.6				
Apr. 17, 1968	0945	60	60.8				
July 17, 1968	0905	71	27.8				
Aug. 1, 1968	1705	74	41.4				
Aug. 12, 1968	1500	68	103				
Sept. 17, 1968	1545	64	159				
Oct. 8, 1968	1530	62	40.8				
Nov. 21, 1968	0935	54	124				
Jan. 9, 1969	1450	48	96.4				
Feb. 11, 1969	1430	55	114				
Mar. 10, 1969	1650	50	76.7				
May 13, 1969	1250	62	47.1				
June 16, 1969	1640	68	46.5				
Aug. 1, 1969	0835	70	21.6				
Sept. 30, 1969	1605	72	31.0				

WHITE RIVER BASIN

7-0522. James River west of Nixa, Mo.

(Formerly published as James River near Nixa, Mo.)

Location.--Lat 37°02'43", long 93°23'24", at bridge on State Highway 14, 5.2 miles west of Nixa, Christian County.

Drainage area.--440 sq mi.

Discharge records available.--None.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 3, 1965	1130	57	---				
Dec. 7, 1965	1830	44	---				
Jan. 10, 1966	1620	49	---				
Feb. 13, 1966	1800	47	---				
Mar. 13, 1966	1700	56	---				
Apr. 17, 1966	1515	68	---				
June 1, 1966	1730	70	---				
June 27, 1966	1900	79	---				
July 28, 1966	----	81	---				
Aug. 26, 1966	1500	78	---				
Sept. 29, 1966	1700	70	---				
Oct. 28, 1966	1400	61	---				
Nov. 17, 1966	1700	59	---				
Dec. 15, 1966	----	47	---				
Jan. 12, 1967	1545	46	---				
Feb. 16, 1967	1410	42	---				
Mar. 13, 1967	1315	64	---				
Apr. 10, 1967	----	63	---				
May 16, 1967	----	59	---				
June 12, 1967	----	74	---				
July 10, 1967	----	75	---				
Aug. 8, 1967	----	78	---				
Sept. 11, 1967	----	70	---				

WHITE RIVER BASIN

7-0522.5 James River near Boaz, Mo.

Location.--Lat 37°00'25", long 93°21'50", Christian County, at Frazier bridge on county road, 2 miles southeast of Boaz.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 10, 1967	1445	57	---				
Nov. 13, 1967	1730	55	462				
Dec. 18, 1967	1545	44	1,670				
Jan. 16, 1968	1150	41	267				
Feb. 13, 1968	0945	42	641				
Mar. 18, 1968	1310	53	1,610				
Apr. 15, 1968	1215	60	449				
May 14, 1968	1145	66	317				
June 24, 1968	1430	73	126				
July 16, 1968	1500	78	110				
Aug. 2, 1968	1020	73	128				
Aug. 13, 1968	0930	67	311				
Sept. 5, 1968	1440	69	77.3				
Sept. 18, 1968	1230	62	266				
Sept. 27, 1968	0945	60	127				
Oct. 21, 1968	1710	59	172				
Nov. 15, 1968	1440	54	723				
Dec. 3, 1968	1400	50	906				
Jan. 9, 1969	1010	41	514				
Feb. 11, 1969	1140	49	589				
Mar. 5, 1969	1500	48	424				
Apr. 25, 1969	1255	63	346				
May 16, 1969	0915	65	189				
June 13, 1969	1350	70	121				
July 9, 1969	1030	78	80.3				
Aug. 13, 1969	1430	74	54.4				
Sept. 15, 1969	1520	70	59.0				

WHITE RIVER BASIN

7-0523. Finley Creek near Ozark, Mo.

Location.--NE¼ sec.14, T.27 N., R.21 W., at bridge on county road 1 mile north of State Highway 14, and 1½ miles northeast of Ozark, Christian County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--79° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 21, 1962	0915	60	60.5				
July 12, 1962	0720	79	21.7				
Dec. 1, 1962	0855	48	27.8				
Sept. 3, 1963	1045	74	14.2				
Oct. 2, 1963	0950	62	12.2				
Nov. 4, 1963	1250	55	13.2				
Sept. 11, 1964	1610	74	10.7				
Oct. 9, 1964	1100	58	9.40				
Oct. 19, 1964	0930	56	10.2				
Nov. 30, 1964	1420	48	43.6				
Oct. 20, 1965	1330	63	38.9				
July 7, 1966	1750	79	25.8				
Nov. 3, 1966	1400	46	18.4				
Sept. 4, 1967	1105	66	16.5				

WHITE RIVER BASIN

7-0523.4 Findley Creek at Riverdale, Mo.

Location.--Lat 36°59'10", long 93°17'40", Christian County, at bridge on U. S. Highway 160, 1 mile southwest of Riverdale, and 0.2 mile downstream from Hog Creek.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 8, 1967	1150	76	---				
Sept. 11, 1967	1430	69	27.0				
Oct. 10, 1967	1300	58	173				
Nov. 14, 1967	----	50	212				
Dec. 19, 1967	0845	46	816				
Jan. 16, 1968	1430	41	126				
Feb. 12, 1968	1350	43	326				
Mar. 18, 1968	1545	52	730				
Apr. 15, 1968	1715	60	170				
May 14, 1968	1415	66	188				
June 24, 1968	1545	70	82.7				
July 16, 1968	1325	76	53.1				
Aug. 13, 1968	1245	70	63.3				
Sept. 27, 1968	1100	62	42.8				
Oct. 21, 1968	1810	58	122				
Nov. 15, 1968	1015	53	700				
Dec. 3, 1968	1215	50	670				
Jan. 9, 1969	1140	42	277				
Feb. 11, 1969	1300	48	312				
Mar. 5, 1969	1200	46	233				
Apr. 25, 1969	1030	58	164				
May 16, 1969	1430	66	111				
June 13, 1969	1130	70	54.0				
July 9, 1969	1430	82	36.0				
Aug. 15, 1969	1130	72	20.0				
Sept. 15, 1969	1300	68	20.0				

WHITE RIVER BASIN

7-0525. James River at Galena, Mo.

Location.--Lat 36°48'20", long 93°27'50", in NW¼ sec.7, T.24 N., R.23 W., on left bank at downstream side of right pier of first arch span from left end of bridge on State Highways 13 and 148, in Galena, half a mile upstream from Railey Creek, and 42.3 miles above mouth.

Drainage area.--987 sq mi.

Discharge records available.--October 1921 to September 1969.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 12, 1945	0615	76	191
July 2, 1946	1000	80	481
Aug. 18, 1946	1400	76	118
Oct. 20, 1946	1440	61	86.8
Feb. 4, 1947	1400	36	329
June 27, 1947	0755	69	630
Oct. 30, 1947	1340	63	129
Dec. 4, 1947	0930	49	118
Jan. 15, 1948	0805	34	270
Apr. 15, 1948	0800	55	486
May 28, 1948	0715	66	312
July 10, 1948	1035	74	1,070
Aug. 21, 1948	0845	77	295
Oct. 7, 1947	1740	59	163
Nov. 20, 1948	1330	57	212
Jan. 6, 1949	0930	32	412
May 6, 1949	0920	77	504
July 28, 1949	1535	81	388
Aug. 31, 1949	1430	74	171
Dec. 2, 1949	1025	37	211
June 24, 1950	1140	77	547
Aug. 4, 1950	1215	73	344
Nov. 9, 1950	1400	53	179
Dec. 28, 1950	1730	33	131
June 10, 1951	1250	69	684
Aug. 4, 1951	1215	77	604
Aug. 5, 1952	1410	83	101
Sept. 24, 1952	1350	69	93.4
Nov. 6, 1952	1520	53	81.8
Mar. 26, 1953	1410	46	712
Oct. 6, 1953	1140	68	84.6
Nov. 17, 1953	1020	51	60.0
Jan. 5, 1954	0935	38	68.2
Feb. 16, 1954	1020	52	74.3
June 15, 1954	1050	80	130
July 27, 1954	1030	82	35.6
Aug. 24, 1954	0715	77	11.9
Oct. 5, 1954	0825	75	141
Dec. 14, 1954	0920	40	700
Aug. 16, 1955	1005	75	94.2
Jan. 31, 1961	1300	37	122
Dec. 6, 1961	0955	44	198
Jan. 9, 1962	1630	34	496
July 11, 1962	1015	79	134
Aug. 15, 1962	1700	83	74.6
Apr. 3, 1963	1425	65	341
May 8, 1963	1730	75	466
June 12, 1963	0750	74	512
Oct. 31, 1963	1350	61	67.6
Dec. 3, 1963	1320	42	76.9
Jan. 8, 1964	1310	41	71.3
Feb. 11, 1964	1300	40	102
Mar. 18, 1964	1030	51	350
Apr. 22, 1964	1220	67	456
May 26, 1964	1030	77	193
July 9, 1964	1105	75	270
Aug. 13, 1964	1315	76	87.3
Sept. 16, 1964	0910	70	99.5
Oct. 8, 1964	0950	57	79.1
Nov. 12, 1964	1030	60	129
Dec. 17, 1964	1300	36	142
Jan. 20, 1965	1620	40	256
Mar. 30, 1965	1150	50	434
Apr. 7, 1965	1235	57	17,600
Apr. 15, 1965	0920	58	2,650
July 9, 1965	1020	77	881
Aug. 11, 1965	1500	78	270
Sept. 10, 1965	1325	75	873
Nov. 22, 1965	1400	50	196
Mar. 22, 1966	1140	65	1,080
June 16, 1966	1310	76	386
July 13, 1966	0745	82	140
July 28, 1966	1305	81	294
Aug. 30, 1966	1340	75	231
Oct. 3, 1966	1520	64	343
Nov. 17, 1966	1500	55	237
Dec. 15, 1966	1630	41	288
June 15, 1967	1020	76	419
Aug. 11, 1967	1250	71	214
Sept. 15, 1967	0920	69	137
Oct. 12, 1967	1455	58	630
Feb. 6, 1968	1330	49	3,460
May 22, 1968	1125	60	542
July 2, 1968	1725	68	1,350
Aug. 26, 1968	1650	78	283
Sept. 30, 1968	1525	68	290
Nov. 21, 1968	1630	54	2,140
Jan. 13, 1969	1610	42	1,030
Feb. 13, 1969	1500	45	1,260
Mar. 13, 1969	1150	44	882
June 3, 1969	1215	67	324
Sept. 18, 1969	1525	72	190

WHITE RIVER BASIN

7-0527.5 Flat Creek at Cassville, Mo.

Location.--NW¼ sec.28, T.23 N., R.27 W., at bridge on county road 1/4 mile east of State Highway 37 and at the northeast edge of Cassville, Barry County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--76° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 10, 1946	1205	76	7.43				
July 28, 1949	1330	75	8.24				
May 21, 1962	1600	67	10.9				
Aug. 20, 1962	1310	76	3.74				
Nov. 30, 1962	1035	54	4.97				
Sept. 5, 1963	1650	74	2.61				
Oct. 4, 1963	1225	69	2.24				
Nov. 7, 1963	0725	53	2.19				
Sept. 11, 1964	1400	68	4.73				
Oct. 9, 1964	0805	55	2.28				
Oct. 19, 1964	1645	57	1.92				
Dec. 3, 1964	0830	48	.09				
Aug. 11, 1965	1150	70	3.50				
Oct. 20, 1965	0720	59	2.82				
July 7, 1966	1350	71	5.07				
Nov. 4, 1966	1215	52	2.30				
Sept. 5, 1967	0840	62	2.86				

WHITE RIVER BASIN

7-0528. Flat Creek at Jenkins, Mo.

Location.--E½ sec.24, T.24 N., R.26 W., at bridge on county road 1/4 mile south of State Highway 39, 1/2 mile north of State Highway 148 and at Jenkins, Barry County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 21, 1962	1500	65	72.1				
Aug. 20, 1962	1225	76	24.5				
Nov. 30, 1962	1130	50	41.6				
Sept. 5, 1963	1730	77	21.0				
Oct. 4, 1963	1325	65	16.4				
Nov. 7, 1963	0930	52	17.0				
Sept. 11, 1964	1300	73	32.5				
Oct. 9, 1964	0905	55	23.0				
Oct. 19, 1964	1550	56	19.0				
Dec. 3, 1964	1100	45	45.0				
Aug. 11, 1965	1330	77	21.0				
July 7, 1966	1525	71	36.7				
Nov. 4, 1966	1115	45	21.9				
Sept. 4, 1967	1640	66	22.1				

WHITE RIVER BASIN

7-0530. White River near Reeds Spring, Mo.

Location.--Lat 36°37'20", long 93°25'20", in NE¼SE¼ sec.9, T.22 N., R.23 W., on downstream side of center pier of bridge on State Highway 13, 5-3/4 miles downstream from James River, 12 miles south of Reeds Spring, and at mile 543.8.

Drainage area.--3,617 sq mi.

Discharge records available.--February 1938 to September 1952 (discontinued).

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 21, 1945	0840	63	119				
Aug. 11, 1946	0830	82	359				
Oct. 20, 1946	0930	59	198				
Feb. 14, 1947	0900	49	1,000				
Oct. 31, 1947	0925	64	306				
Dec. 4, 1947	1255	47	486				
Oct. 8, 1948	0930	64	352				
Nov. 20, 1948	1055	58	511				
Sept. 1, 1949	0700	73	456				
Nov. 9, 1950	0920	54	574				
Dec. 29, 1950	1045	36	418				
Aug. 6, 1952	0730	78	319				
Sept. 24, 1952	1145	69	265				
Nov. 6, 1952	1310	51	219				

WHITE RIVER BASIN

7-0535. White River near Branson, Mo.

Location.--Lat 36°35'51", long 93°17'42", in SE¼NE¼ sec.22, T.22 N., R.22 W., on left bank 0.9 mile downstream from Table Rock Dam, 5 miles southwest of Branson, 7.4 miles upstream from Missouri Pacific bridge, and at mile 527.8.

Drainage area.--4,022 sq mi.

Discharge records available.--July 1909 to December 1910 (gage heights and discharge measurements only), October 1951 to September 1969.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 5, 1952	1015	82	340				
Sept. 23, 1952	1120	68	283				
Nov. 6, 1952	0950	52	228				
July 7, 1953	0530	78	502				
Oct. 6, 1953	0745	68	181				
Nov. 17, 1953	0800	50	168				
Jan. 5, 1954	0735	36	225				
June 15, 1954	0740	81	551				
Aug. 23, 1954	1625	88	37.3				
Dec. 14, 1954	0635	40	1,230				
Aug. 16, 1955	0800	78	416				
Jan. 31, 1961	1555	46	94.0				
Feb. 19, 1963	1540	41	1,740				
Feb. 20, 1963	1010	41	6,360				
Sept. 14, 1965	1245	48	5,760				

WHITE RIVER BASIN

7-0538. Bull Creek at Walnut Shade, Mo.

Location.--SW¼ sec.34, T.24 N., R.21 W., at bridge on U. S. Highway 160 at Walnut Shade, Taney County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 11, 1945	1600	74	2.40				
Aug. 12, 1946	1630	76	3.04				
July 29, 1949	1000	78	22.3				
May 21, 1962	1100	60	25.6				
July 11, 1962	1520	83	6.40				
Nov. 30, 1962	1600	54	19.4				
Sept. 6, 1963	0845	76	2.60				
Oct. 4, 1963	1515	67	2.60				
Nov. 7, 1963	1155	55	3.18				
Sept. 11, 1964	1115	78	5.89				
Oct. 8, 1964	1600	63	4.74				
Oct. 19, 1964	1115	55	2.38				
Dec. 4, 1964	0945	42	25.6				
Aug. 12, 1965	1400	79	6.67				
Oct. 20, 1965	1150	63	16.4				
July 7, 1966	1125	78	6.19				
Nov. 4, 1966	0930	40	4.32				
Sept. 4, 1967	1230	68	3.22				

WHITE RIVER BASIN

7-0539.8 Swan Creek at Forsyth, Mo.

Location.--W½ sec.34, T.23 N., R.20 W., at bridge on U. S. Highway 160, 1/4 mile above the mouth and at Forsyth, Taney County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
July 11, 1962	1645	78	22.9				
May 21, 1962	1150	60	51.2				
Nov. 30, 1962	1500	54	19.5				
Sept. 6, 1963	1000	78	3.85				
Oct. 4, 1963	----	73	2.84				
Nov. 7, 1963	1325	58	4.74				
Sept. 11, 1964	1010	77	10.6				
Oct. 8, 1964	1500	67	5.73				
Oct. 19, 1964	1235	58	2.91				
Dec. 4, 1964	1045	40	23.1				
Aug. 12, 1965	----	76	17.7				
Oct. 19, 1965	1535	65	15.1				
July 7, 1966	0940	81	12.4				
Nov. 4, 1966	0835	40	6.20				
Sept. 4, 1967	1435	72	5.50				

WHITE RIVER BASIN

7-0540. White River at Forsyth, Mo.

Location.--Lat 36°40'55", long 93°06'05", in SE¼ sec.33, T.24 N., R.20 W., on left bank at downstream side of bridge on State Highway 80 in Forsyth, a quarter of a mile downstream from Swan Creek, 2 miles downstream from hydroelectric plant of Empire District Electric Co., and at mile 503.8.

Drainage area.--4,544 sq mi.

Discharge records available.--January to September 1926 (incomplete), October 1929 to March 1953. Gage-height record only April 1953 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 11, 1945	0625	72	124				
Oct. 21, 1945	1350	65	141				
Aug. 11, 1946	1500	86	111				
Oct. 21, 1946	0615	58	131				
Oct. 7, 1948	0620	59	149				
Nov. 20, 1948	0735	54	173				
Sept. 1, 1949	1115	74	548				
Aug. 5, 1952	0645	81	152				
Sept. 23, 1952	0855	66	102				
Nov. 6, 1952	0720	52	124				

WHITE RIVER BASIN

7-0541.5 Beaver Creek at Kissee Mills, Mo.

Location.--SE¼ sec.15, T.23 N., R.19 W., at bridge on U. S. Highway 160 at Kissee Mills, Taney County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 11, 1945	1430	75	67.1				
Sept. 18, 1946	1025	65	49.3				
Oct. 7, 1948	1140	60	53.4				
May 21, 1962	1230	62	168				
July 11, 1962	1740	81	129				
Nov. 30, 1962	1415	52	63.6				
Sept. 6, 1963	1205	80	40.4				
Oct. 4, 1963	1710	71	29.7				
Nov. 7, 1963	1425	60	33.6				
Sept. 11, 1964	0915	76	32.5				
Oct. 8, 1964	1340	69	43.8				
Oct. 19, 1964	1330	65	34.6				
Dec. 3, 1964	1540	43	58.0				
Aug. 12, 1965	0915	79	90.7				
Oct. 19, 1965	1425	67	78.5				
July 7, 1966	0755	81	74.4				
Nov. 4, 1966	0800	41	43.6				
Sept. 4, 1967	1350	71	39.6				

WHITE RIVER BASIN

7-0574. North Fork River at Twin Bridges, Mo.

Location.--SW¼ sec.27, T.25 N., R.11 W., at bridge on State Highway 14 at west edge of Twin Bridges, Douglas County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 1, 1962	1500	75	43.3				
Sept. 5, 1963	1540	78	47.3				
Oct. 3, 1963	1335	66	37.4				
Nov. 7, 1963	0930	53	43.5				
Sept. 10, 1964	1345	80	31.8				
Oct. 8, 1964	0845	56	30.2				
Dec. 3, 1964	0945	49	39.7				
Aug. 18, 1965	1645	82	52.1				
Oct. 19, 1965	0835	61	54.8				
July 6, 1966	0925	80	62.0				
Oct. 31, 1966	1410	53	43.6				
Sept. 5, 1967	1305	68	37.4				

WHITE RIVER BASIN

7-0674.5 Spring Creek at Twin Bridges, Mo.

Location.--SW¼ sec.27, T.25 N., R.11 W., at bridge on State Highway 14 at east edge of Twin Bridges, Douglas County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--74° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 1, 1962	----	66	22.6				
Sept. 5, 1963	1500	70	22.5				
Oct. 3, 1963	1310	64	21.2				
Nov. 7, 1963	0955	54	22.4				
Sept. 10, 1964	1440	71	19.2				
Oct. 8, 1964	0940	55	18.0				
Dec. 3, 1964	0835	49	21.7				
Aug. 18, 1965	1720	74	19.2				
Oct. 19, 1965	0940	60	19.8				
July 6, 1966	0800	65	21.7				
Sept. 6, 1967	1210	66	17.5				

WHITE RIVER BASIN

7-0575. North Fork River near Tecumseh, Mo.

Location.--Lat 36°37'22", long 92°14'53", in NE¼SE¼ sec.35, T.23 N., R.12 W., on right bank 3.2 miles downstream from Spring Creek, and 3½ miles northeast of Tecumseh.

Drainage area.--561 sq mi.

Discharge records available.--October 1944 to September 1969.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 14, 1946	0920	58	674
July 3, 1946	1400	67	654
Aug. 13, 1946	1345	64	450
Oct. 22, 1946	0830	61	324
Dec. 27, 1946	1225	36	808
Feb. 5, 1947	1410	46	667
Mar. 15, 1947	0920	52	640
May 20, 1947	1125	66	947
June 26, 1947	0925	64	554
Dec. 3, 1947	1045	47	364
May 29, 1948	1025	64	464
July 11, 1948	1000	73	516
Aug. 22, 1948	1225	69	382
Oct. 6, 1948	1430	61	302
Jan. 7, 1949	1330	48	557
May 7, 1949	0925	70	774
July 30, 1949	1100	77	582
Sept. 2, 1949	0700	60	450
Oct. 23, 1949	1355	62	517
Dec. 3, 1949	1335	47	390
June 25, 1950	1330	77	824
Aug. 6, 1950	1220	65	528
Sept. 18, 1950	1530	69	545
Oct. 17, 1950	1645	63	405
Nov. 8, 1950	1420	59	387
Dec. 30, 1950	1215	46	364
June 11, 1951	1625	67	824
Aug. 4, 1952	1130	68	425
Sept. 22, 1952	1410	69	371
Nov. 5, 1952	1110	53	355
June 3, 1953	1100	65	498
Oct. 5, 1953	1110	60	264
Nov. 16, 1953	1120	52	244
Jan. 4, 1954	1125	47	252
June 14, 1954	1220	75	251
July 26, 1954	0945	72	272
Aug. 23, 1954	1010	72	198
Oct. 4, 1954	1100	69	210
Dec. 13, 1954	1005	47	338
Jan. 31, 1955	1005	46	275
Aug. 15, 1955	1015	66	311
Oct. 24, 1955	1050	56	227
Feb. 1, 1961	1645	50	306
Dec. 7, 1961	1125	44	320
Jan. 9, 1962	0850	40	407
Aug. 1, 1962	0815	66	307
Oct. 10, 1962	0730	60	367
Apr. 30, 1963	1215	59	326
May 17, 1963	1455	67	4,540
Aug. 13, 1963	1615	76	368
Sept. 17, 1963	1705	69	285
Oct. 22, 1963	1120	59	259
Jan. 6, 1964	1345	48	254
Feb. 4, 1964	1235	50	222
Mar. 9, 1964	1435	47	5,260
Mar. 10, 1964	1145	47	3,530
Apr. 21, 1964	0850	62	618
May 18, 1964	1710	71	464
June 23, 1964	1200	73	392
Aug. 3, 1964	1700	76	278
Sept. 9, 1964	0910	66	251
Oct. 7, 1964	1700	58	242
Nov. 5, 1964	0925	56	227
Dec. 15, 1964	0945	44	239
Jan. 19, 1965	1520	46	258
Feb. 23, 1965	1435	47	329
Mar. 23, 1965	1030	51	295
May 5, 1965	1000	64	454
June 3, 1965	1415	70	522
July 8, 1965	1005	67	592
Aug. 4, 1965	1625	70	349
Sept. 2, 1965	1050	69	782
Oct. 7, 1965	1030	59	395
Nov. 13, 1965	1020	58	337
Dec. 16, 1965	1400	49	429
Jan. 21, 1966	0915	48	527
May 5, 1966	0925	63	1,230
Aug. 25, 1966	1515	67	371
Sept. 26, 1966	1600	64	333
Nov. 1, 1966	1530	51	318
Dec. 6, 1966	1550	49	385
Jan. 12, 1967	1005	45	352
Feb. 16, 1967	1050	47	394
Mar. 30, 1967	1030	61	376
May 4, 1967	0925	58	586
June 8, 1967	1040	64	411
July 13, 1967	1030	63	488
Aug. 24, 1967	1030	65	273
Oct. 5, 1967	1045	61	279
Feb. 9, 1968	1315	48	1,050
July 10, 1968	1045	65	433
Aug. 28, 1968	0945	60	406
Oct. 1, 1968	1615	64	412
Nov. 26, 1968	0925	52	617
Jan. 14, 1969	1620	48	796
Mar. 30, 1969	0905	52	759
June 2, 1969	1255	62	619
July 10, 1969	1110	70	443
Sept. 19, 1969	1245	64	360

WHITE RIVER BASIN

7-0580. Bryant Creek near Tecumseh, Mo.

Location.--Lat 36°37'35", long 92°18'25", in E½ sec.32, T.23 N., R.12 W., on left bank three-quarters of a mile downstream from Pine Creek, 3 miles northwest of Tecumseh, and 5 miles upstream from mouth.

Drainage area.--570 sq mi.

Discharge records available.--October 1944 to September 1969.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Apr. 15, 1946	1145	60	396
July 3, 1946	0800	71	347
Dec. 22, 1946	0930	37	576
Feb. 5, 1947	0950	38	352
Mar. 15, 1947	1205	53	384
May 20, 1947	1455	65	682
June 26, 1947	1200	68	333
Dec. 3, 1947	1340	48	182
Jan. 14, 1948	0925	39	351
Apr. 16, 1948	0840	58	471
May 29, 1948	0700	66	268
July 11, 1948	1545	78	311
Aug. 22, 1948	0920	75	194
Oct. 6, 1948	1600	63	150
Nov. 19, 1948	1410	60	202
Jan. 7, 1949	1035	43	293
May 7, 1949	0610	74	397
July 30, 1949	0650	75	352
Sept. 1, 1949	1600	74	231
Oct. 16, 1949	1425	63	356
Oct. 23, 1949	1130	59	317
June 25, 1950	0950	75	569
Aug. 5, 1950	1645	71	329
Sept. 18, 1950	1315	71	372
Oct. 18, 1950	0930	64	239
Nov. 8, 1950	1645	58	234
Dec. 30, 1950	0930	40	201
Apr. 19, 1951	1400	53	687
June 11, 1951	1210	66	700
Aug. 5, 1951	1255	76	402
Oct. 25, 1951	1130	57	818
Aug. 4, 1952	1415	67	184
Sept. 22, 1952	1710	68	159
Nov. 5, 1952	1340	55	170
Oct. 5, 1953	1340	68	137
Nov. 16, 1953	1345	53	128
Jan. 4, 1954	1415	44	131
May 3, 1954	1420	65	303
July 26, 1954	1300	82	107
Aug. 3, 1954	1250	77	102
Oct. 4, 1954	1240	75	118
Dec. 13, 1954	1230	46	212
Jan. 31, 1955	1245	48	144
Aug. 15, 1955	1245	69	135
Feb. 1, 1961	1425	47	162
Dec. 7, 1961	0900	45	160
Jan. 9, 1962	1020	37	263
Oct. 10, 1962	1005	65	182
Dec. 11, 1962	0840	36	162
Apr. 30, 1963	0840	62	165
July 9, 1963	0930	69	234
Aug. 14, 1963	0950	74	182
Sept. 18, 1963	0835	68	141
Oct. 22, 1963	1410	64	127
Nov. 27, 1963	1400	49	146
Jan. 6, 1964	1430	42	131
Feb. 4, 1964	1130	46	126
Apr. 14, 1964	1530	59	415
May 19, 1964	0830	70	212
June 23, 1964	1505	74	164
Aug. 4, 1964	0950	78	119
Sept. 9, 1964	1350	75	123
Oct. 7, 1964	1205	57	123
Nov. 5, 1964	1210	59	127
Dec. 15, 1964	1400	45	126
Feb. 23, 1965	1645	47	159
Mar. 23, 1965	1335	42	147
May 4, 1965	1600	69	362
June 3, 1965	1530	74	321
July 8, 1965	1640	77	469
Aug. 4, 1965	1100	76	156
Sept. 2, 1965	1245	70	545
Oct. 7, 1965	1310	62	225
Nov. 13, 1965	1245	58	155
Dec. 16, 1965	1000	48	218
Jan. 21, 1966	1330	43	288
Feb. 11, 1966	1720	49	3,040
Mar. 24, 1966	1200	53	391
May 5, 1966	1210	64	798
June 15, 1966	0940	72	278
Aug. 25, 1966	1730	68	273
Sept. 27, 1966	0955	66	195
Nov. 1, 1966	1250	51	147
Dec. 6, 1966	1000	49	182
Jan. 12, 1967	1400	45	204
Feb. 16, 1967	1300	45	216
Mar. 30, 1967	1320	65	211
May 4, 1967	1210	60	425
June 8, 1967	1340	74	205
July 13, 1967	1345	71	380
Aug. 24, 1967	1215	73	141
Oct. 5, 1967	1230	66	147
Dec. 14, 1967	1545	45	1,720
Feb. 9, 1968	1140	43	890
July 10, 1968	1300	76	240
Aug. 27, 1968	1350	74	190
Oct. 1, 1968	1340	64	193
Nov. 26, 1968	1205	50	370
Jan. 14, 1969	1310	44	467
Mar. 20, 1969	1115	53	484
June 2, 1969	1445	66	331
July 10, 1969	1015	77	220
Sept. 19, 1969	1125	68	167

WHITE RIVER BASIN

7-0589. Bennett Bayou at Bakersfield, Mo.

Location.--E½ sec.2, T.21 N., R.11 W., at bridge on State Highway 142 at east edge of Bakersfield, Ozark County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 7, 1963	0815	52	3.22				
Sept. 10, 1964	1200	78	5.07				
Oct. 7, 1964	1645	61	5.18				
Dec. 2, 1964	1715	45	7.58				
Aug. 18, 1965	1000	77	7.86				
Oct. 18, 1965	1405	69	7.52				
July 5, 1966	1420	81	12.8				
Nov. 1, 1966	1705	49	8.02				
Sept. 5, 1967	1520	74	7.70				
Oct. 24, 1968	0800	53	21.8				

WHITE RIVER BASIN

7-0611.5 West Fork Black River at Centerville, Mo.

Location.--NE¼ sec.29, T.32 N., R.1 E., at bridge on State Highway 21, 1/4 mile north of Centerville, Reynolds County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 29, 1945	1410	78	30.2				
Nov. 21, 1946	1225	48	84.8				
May 21, 1962	1300	73	73.4				
Sept. 5, 1963	0845	73	49.3				
Oct. 2, 1963	1105	67	21.0				
Nov. 5, 1963	1115	59	32.6				
Sept. 8, 1964	1645	78	20.1				
Oct. 6, 1964	1230	64	21.0				
Aug. 16, 1965	1130	80	13.8				
Oct. 14, 1965	1250	64	34.8				
July 5, 1966	0955	76	33.1				
Nov. 4, 1966	----	50	29.8				
Sept. 7, 1967	1205	72	28.2				
Oct. 9, 1968	0805	63	35.5				
Oct. 10, 1968	1255	65	42.0				

WHITE RIVER BASIN

7-0611.7 Middle Fork Black River near Lesterville, Mo.

Location.—SE¼ sec.2, T.32 N., R.1 E., at bridge on State Highway 21, 4 miles northwest of Lesterville, Reynolds County.

Drainage area.—Not determined.

Discharge records available.—Discharge measurements only.

Maximum temperature measured.—77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 21, 1962	1245	74	58.0				
Sept. 5, 1963	0815	73	28.8				
Oct. 2, 1963	1025	69	17.1				
Nov. 5, 1963	1045	61	26.7				
Sept. 8, 1964	1745	76	15.5				
Oct. 6, 1964	1330	63	19.8				
Aug. 16, 1965	1230	74	7.81				
Oct. 14, 1965	1350	67	28.4				
July 5, 1966	1035	77	22.4				
Nov. 4, 1966	1105	53	29.7				
Sept. 7, 1967	1300	71	12.6				
Oct. 9, 1968	0920	60	31.6				

WHITE RIVER BASIN

7-0612. East Fork Black River near Lesterville, Mo.

Location.--Lat 37°32'15", long 90°50'15", in SW¼ sec.16, T.33 N., R.2 E., Reynolds County, on right bank in Johnson Shut-ins Park about 1/2 mile downstream from park superintendents home, 1½ mile downstream from Imboden Fork, 2 miles upstream from Walker Branch, and 6 miles north of Lesterville.

Drainage area.--57.4 sq mi.

Discharge records available.--May 1963 to September 1966, unpublished.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 5, 1963	1200	78	6.40				
Sept. 12, 1963	1400	79	40.1				
Oct. 14, 1963	1130	64	11.4				
Nov. 20, 1963	1345	56	3.98				
Dec. 16, 1963	1330	35	12.4				
Jan. 30, 1964	1105	38	13.8				
Mar. 2, 1964	1115	43	20.1				
June 15, 1964	1605	80	22.7				
July 27, 1964	1230	76	15.1				
Sept. 1, 1964	1140	77	13.6				
Oct. 5, 1964	1115	62	3.28				
Nov. 2, 1964	1300	77	18.0				
Dec. 14, 1964	1245	43	21.4				
Feb. 17, 1965	1130	45	40.2				
Mar. 22, 1965	1200	45	28.8				
Apr. 26, 1965	1300	61	26.6				
June 1, 1965	1530	70	12.3				
July 5, 1965	1140	84	11.2				
Aug. 2, 1965	1110	75	10.4				

WHITE RIVER BASIN

7-0613. East Fork Black River at Lesterville, Mo.

Location.--Lat 37°27'00", long 90°49'40", in NE¼SE¼ sec.16, T.32 N., R.2 E., at bridge on State Highway 21 at Lesterville, and three-quarters of a mile upstream from Black River.

Drainage area.--94.5 sq mi.

Discharge records available.--January 1960 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 13, 1961	0940	42	291				
Apr. 24, 1961	0915	62	104				
June 19, 1961	1030	67	112				
July 28, 1961	1610	84	11.8				
Jan. 31, 1962	1555	42	92.4				
Apr. 2, 1962	1200	45	106				
Aug. 20, 1962	1200	80	.82				
Oct. 29, 1962	1240	59	10.6				
Feb. 11, 1963	1235	36	11.7				
Apr. 22, 1963	1225	70	18.5				
Aug. 5, 1963	1430	80	.87				
Sept. 12, 1963	1255	77	2.10				
Dec. 16, 1963	1550	39	3.17				
Jan. 30, 1964	1250	42	4.12				
Mar. 2, 1964	1355	44	88.1				
Mar. 6, 1964	1035	44	155				
Apr. 7, 1964	0910	53	496				
June 15, 1964	1350	78	24.6				
July 27, 1964	1100	77	.47				
Sept. 1, 1964	1530	79	1.75				
Oct. 5, 1964	1515	62	10.6				
Nov. 2, 1964	1030	58	3.74				
Dec. 14, 1964	1030	41	6.23				
Jan. 11, 1965	1315	42	28.6				
Feb. 15, 1965	1430	44	15.5				
Mar. 22, 1965	1120	45	13.9				
Apr. 26, 1965	1115	60	42.6				
June 1, 1965	1145	69	3.15				
July 5, 1965	1345	86	4.43				
Aug. 2, 1965	1050	75	2.30				
Aug. 30, 1965	1050	70	1.41				
Oct. 13, 1965	1305	60	10.8				
Nov. 5, 1965	1200	59	2.50				
Dec. 17, 1965	1130	46	77.8				
Jan. 12, 1966	1635	44	19.3				
Feb. 15, 1966	1215	42	71.4				
Mar. 21, 1966	1240	54	35.0				
May 2, 1966	1030	58	93.2				
June 6, 1966	1050	70	7.55				
July 14, 1966	1545	87	1.79				
Aug. 15, 1966	1105	78	19.5				
Sept. 19, 1966	1200	68	2.06				
Jan. 9, 1967	1340	37	161				
Feb. 6, 1967	1305	40	203				
Mar. 20, 1967	1125	47	139				
Apr. 28, 1967	1100	60	262				
May 29, 1967	1205	71	15.6				
July 25, 1967	1535	76	2.18				
Aug. 28, 1967	1155	68	1.18				
Oct. 12, 1967	1450	62	4.00				
Dec. 11, 1967	1140	46	87.6				
Jan. 22, 1968	1225	40	38.0				
Mar. 11, 1968	1330	45	85.6				
May 17, 1968	1550	60	21.5				
Aug. 8, 1968	1410	80	4.32				
Oct. 10, 1968	1435	62	4.01				
Dec. 10, 1968	1100	41	28.5				
Feb. 6, 1969	1700	43	267				
Mar. 14, 1969	1055	38	34.5				
Apr. 18, 1969	0940	58	452				
May 22, 1969	1455	66	9.71				
July 22, 1969	1200	77	3.15				
Sept. 25, 1969	1310	70	15.9				

WHITE RIVER BASIN

7-0615. Black River near Annapolis, Mo.

Location.--Lat 37°20'10", long 90°47'15", in SW¼NW¼ sec.25, T.31 N., R.2 E., on right bank 0.4 mile downstream from Mayberry Branch, 7 miles southwest of Annapolis, 11 miles downstream from East Fork, and at mile 278.5.

Drainage area.--484 sq mi.

Discharge records available.--April 1939 to September 1969.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 29, 1945	1050	76	118
Oct. 10, 1945	1345	58	254
May 26, 1946	0955	62	1,190
June 27, 1946	1300	73	212
Oct. 12, 1946	1350	59	124
Nov. 20, 1946	1200	49	370
Jan. 23, 1947	0920	38	320
Mar. 12, 1947	1210	47	377
Apr. 3, 1947	0830	49	498
May 8, 1947	1350	62	609
June 18, 1947	1510	73	209
July 31, 1947	0840	77	148
Sept. 4, 1947	1015	75	116
Nov. 30, 1947	1600	45	254
Apr. 9, 1948	0830	55	520
May 20, 1948	0815	61	622
June 22, 1948	1400	76	232
Aug. 4, 1948	0805	73	131
Dec. 16, 1948	1520	52	403
Mar. 9, 1949	0955	46	379
Apr. 20, 1949	0940	53	344
June 7, 1949	1225	75	537
July 12, 1949	1400	79	285
Aug. 21, 1949	1415	75	221
Sept. 30, 1949	1520	56	132
Nov. 7, 1949	1315	52	287
Dec. 13, 1949	1345	43	371
Oct. 13, 1950	0955	60	194
Jan. 6, 1951	1000	41	659
Mar. 23, 1951	0910	51	638
Mar. 31, 1951	1720	52	398
May 9, 1951	1500	66	453
Dec. 17, 1951	1430	38	571
July 15, 1952	1115	76	565
Aug. 26, 1952	1445	65	176
Jan. 13, 1953	1050	43	277
Feb. 24, 1953	1130	44	543
Apr. 7, 1953	0800	48	630
May 19, 1953	1045	64	1,010
July 14, 1953	1530	71	109
Aug. 11, 1953	1645	78	87.4
Nov. 10, 1953	1600	56	118
Dec. 15, 1953	1420	44	126
Jan. 27, 1954	0830	40	230
May 14, 1954	1610	66	246
Sept. 14, 1954	0915	68	67.3
Apr. 14, 1961	0740	44	609
Apr. 25, 1961	0715	63	532
June 20, 1961	1025	70	544
Aug. 31, 1961	1200	78	106
Oct. 31, 1961	1015	64	120
Jan. 31, 1962	0900	40	718
Apr. 2, 1962	1330	47	810
Aug. 20, 1962	1450	81	72.8
Oct. 1, 1962	1340	66	812
Dec. 5, 1962	1220	48	144
Feb. 11, 1963	1550	40	156
Apr. 22, 1963	1510	70	183
Sept. 12, 1963	1010	74	119
Oct. 14, 1963	1630	68	87.7
Nov. 20, 1963	0910	56	117
Dec. 17, 1963	1010	38	125
Jan. 29, 1964	1555	44	145
June 16, 1964	0935	75	157
July 27, 1964	1610	74	88.4
Sept. 2, 1964	0845	73	112
Oct. 5, 1964	1705	62	104
Nov. 6, 1964	1115	59	103
Dec. 14, 1964	1650	46	137
Jan. 11, 1965	1605	44	201
Feb. 15, 1965	1240	44	362
Mar. 22, 1965	1730	59	209
Apr. 26, 1965	1740	60	308
June 4, 1965	1845	76	1,760
July 5, 1965	1600	81	122
Aug. 2, 1965	1620	76	68.6
Aug. 31, 1965	0835	75	91.8
Nov. 5, 1965	1350	61	121
Dec, 17, 1965	0945	45	326
Jan. 12, 1966	1500	45	387
May 2, 1966	1245	60	810
June 6, 1966	1545	73	242
July 14, 1966	1320	83	91.6
Aug. 15, 1966	1515	77	209
Sept. 19, 1966	1455	68	108
Dec. 2, 1966	1050	44	498
Jan. 9, 1967	1645	38	313
Mar. 20, 1967	1510	48	461
Apr. 27, 1967	1505	60	1,720
July 24, 1967	1155	48	98.7
Aug. 28, 1967	1525	75	88.2
Oct. 12, 1967	1110	55	123
Jan. 22, 1968	1540	46	267
Mar. 11, 1968	1610	44	466
May 17, 1968	1335	60	469
June 27, 1968	1210	66	141
Aug. 8, 1968	1110	77	131
Oct. 10, 1968	1145	59	133
Dec. 10, 1968	1345	44	340
Feb. 6, 1969	1125	43	803
Mar. 13, 1969	1325	44	482
Apr. 17, 1969	1025	57	1,110
May 22, 1969	1225	64	300
July 18, 1969	0940	77	115
July 22, 1969	1435	77	143
Aug. 25, 1969	1600	77	78.0
Sept. 19, 1969	1330	68	266
Sept. 25, 1969	0930	64	181

WHITE RIVER BASIN

7-0619. Logan Creek at Ellington, Mo.

Location.--NE¼ sec.32, T.30 N., R.1 E., at bridge on State Highway 21 at Ellington, Reynolds County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 17, 1956	1100	80	1.00				
Oct. 18, 1961	1100	59	1.60				
May 21, 1962	1430	74	16.4				
Sept. 4, 1963	1125	75	3.70				
Oct. 1, 1963	1100	68	1.99				
Nov. 5, 1963	1240	60	1.60				
Sept. 8, 1964	1545	76	.90				
Oct. 6, 1964	1440	64	1.30				
Aug. 16, 1965	1410	74	.35				
July 5, 1966	1225	79	4.21				
Nov. 4, 1966	0940	48	2.52				
Sept. 6, 1967	1500	73	.51				
Oct. 21, 1968	1715	62	1.60				

WHITE RIVER BASIN

7-0621. McKenzie Creek near Piedmont, Mo.

Location.--SE¼ sec.3, T.28 N., R.3 E., at ford on county highway, 1½ miles southwest of Piedmont, Wayne County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 11, 1962	1755	56	3.29				
Dec. 5, 1962	1100	47	4.73				
Jan. 7, 1963	1415	42	15.0				
Apr. 22, 1963	1910	76	4.32				
Sept. 9, 1963	1145	77	3.74				
Nov. 19, 1963	1520	55	3.38				
Dec. 16, 1965	1600	47	11.2				
Jan. 10, 1966	1110	39	11.5				
May 3, 1966	1020	59	58.9				
Feb. 7, 1967	0840	34	36.5				
Apr. 27, 1967	1030	61	9.68				
Dec. 12, 1967	0750	45	135				
Jan. 23, 1968	0850	42	8.74				
Mar. 23, 1968	0735	39	78.2				
May 17, 1968	1055	62	31.0				
Oct. 9, 1968	1650	62	5.17				
Dec. 11, 1968	1240	42	9.40				
Mar. 13, 1969	1025	39	15.0				
Apr. 17, 1969	1605	62	48.6				
July 22, 1969	1755	77	11.0				

WHITE RIVER BASIN

7-0625. Black River at Leeper, Mo.

Location.--Lat 37°04'45", long 90°42'50", in SE¼SW¼ sec.22, T.28 N., R.3 E., on downstream side of pier at right end of left truss of bridge on State Highway 34, half a mile northwest of Leeper, 2 miles downstream from McKenzie Creek, 6 miles downstream from Clearwater Dam, and at mile 251.0.

Drainage area.--957 sq mi.

Discharge records available.--June 1921 to September 1969.

Maximum temperature measured.--90° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 28, 1945	1420	76	303
Apr. 11, 1946	0730	60	717
May 23, 1946	1300	62	1,770
June 26, 1946	1450	84	535
Aug. 7, 1946	1315	78	380
Oct. 11, 1946	1715	62	294
Nov. 20, 1946	0810	50	715
Jan. 22, 1947	1030	38	612
Feb. 27, 1947	1330	43	380
Apr. 2, 1947	1255	58	704
May 18, 1947	0755	63	1,130
June 18, 1947	1050	72	420
July 30, 1947	1320	79	325
Sept. 4, 1947	0730	75	258
Oct. 10, 1947	1610	69	257
Nov. 30, 1947	0720	44	568
Feb. 26, 1948	0830	46	848
June 22, 1948	1630	76	272
Aug. 3, 1948	1350	90	394
Sept. 15, 1948	0820	72	302
Nov. 4, 1948	1630	69	524
Dec. 16, 1948	1120	51	377
Aug. 21, 1949	0655	75	510
Sept. 30, 1949	1230	61	383
Nov. 7, 1949	1000	47	727
Jan. 10, 1950	1145	47	320
July 25, 1950	0830	69	583
Oct. 13, 1950	1525	66	350
Nov. 17, 1950	1530	56	365
May 9, 1951	1150	63	1,570
July 15, 1952	0835	76	551
Aug. 26, 1952	0925	76	592
Oct. 14, 1952	0740	59	290
Jan. 13, 1953	0745	39	501
Apr. 6, 1953	1800	55	366
July 19, 1953	0910	73	308
Aug. 11, 1953	1250	81	242
Sept. 22, 1953	1120	69	204
Nov. 10, 1953	1145	55	252
Dec. 15, 1953	1100	43	286
Jan. 26, 1954	1615	44	493
May 14, 1954	1330	68	564
Feb. 13, 1961	1540	45	414
Apr. 24, 1961	1600	62	969
Aug. 31, 1961	0930	76	255
Aug. 20, 1962	1730	81	170
Oct. 30, 1962	0950	63	345
Dec. 5, 1962	0930	48	263
Jan. 7, 1963	1315	40	512
Feb. 12, 1963	0845	36	312
Apr. 22, 1963	1825	69	353
May 28, 1963	0730	64	747
Sept. 9, 1963	1100	77	415
Oct. 15, 1963	0745	64	192
Nov. 19, 1963	1600	55	188
Dec. 17, 1963	1445	39	264
Jan. 23, 1964	1530	48	227
Mar. 3, 1964	0725	45	307
Apr. 7, 1964	1220	58	437
June 16, 1964	1225	78	263
July 28, 1964	0945	78	260
Sept. 1, 1964	1840	79	240
Nov. 3, 1964	0810	56	216
Dec. 15, 1964	0950	46	218
Jan. 14, 1965	0900	41	529
Feb. 15, 1965	0930	41	719
Apr. 27, 1965	0900	60	581
June 4, 1965	1400	76	562
July 9, 1965	1010	74	262
Aug. 5, 1965	1600	79	214
Aug. 31, 1965	1015	74	202
Oct. 8, 1965	1215	64	828
Nov. 5, 1965	1500	63	287
Dec. 16, 1965	1400	47	630
Jan. 18, 1966	1110	40	1,030
Feb. 15, 1966	1115	42	3,040
Mar. 22, 1966	1100	55	526
May 3, 1966	0940	61	2,930
June 10, 1966	0940	71	1,560
Aug. 24, 1966	0950	76	794
Sept. 20, 1966	0955	66	248
Sept. 27, 1966	1800	65	349
Jan. 10, 1967	0810	38	395
Feb. 7, 1967	1210	43	2,930
Mar. 21, 1967	0740	49	673
Apr. 27, 1967	0900	59	610
June 2, 1967	0840	67	523
July 24, 1967	1440	80	247
Aug. 29, 1967	0905	69	243
Oct. 11, 1967	1655	60	236
Dec. 12, 1967	1030	47	762
Jan. 23, 1968	1050	40	359
Mar. 23, 1968	1020	45	1,730
May 17, 1968	1005	65	1,280
June 27, 1968	0910	66	265
Aug. 8, 1968	0820	75	239
Oct. 10, 1968	0910	60	287
Dec. 11, 1968	1145	44	802
Feb. 5, 1969	1200	48	3,610
Mar. 13, 1969	0940	42	708
Apr. 17, 1969	0830	57	---
May 21, 1969	1610	68	1,090
July 22, 1969	1705	79	339
Sept. 22, 1969	1325	72	467

7-0630. Black River at Poplar Bluff, Mo.

Location.--Lat 36°45'35", long 90°23'15", in SW¼NW¼ sec.2, T.24 N., R.6 E., on right bank at City Light and Water Plant in Poplar Bluff, 1,500 ft upstream from bridge on U. S. Highway 60, 4-3/4 miles downstream from Indian Creek, and at mile 211.2.

Drainage area.--1,245 sq mi.

Discharge records available.--October 1936 to September 1937, October 1939 to September 1969.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 30, 1945	1515	78	427				
Oct. 16, 1946	1525	61	370				
Sept. 8, 1947	1525	72	344				
Dec. 3, 1947	1200	50	638				
Nov. 10, 1949	1340	57	503				
July 17, 1953	1420	71	377				
Aug. 15, 1953	1230	81	311				
Dec. 19, 1953	1105	36	336				
Jan. 30, 1954	0840	46	583				
Sept. 1, 1961	0900	77	344				
Nov. 2, 1961	0815	66	417				
Aug. 23, 1962	0730	78	297				
Oct. 31, 1962	0615	60	508				
Feb. 14, 1963	1140	42	382				
Apr. 25, 1963	1845	66	441				
Oct. 17, 1963	1200	69	265				
Mar. 5, 1964	1635	51	807				
Sept. 4, 1964	1425	78	348				
Jan. 13, 1965	0845	38	694				
Mar. 26, 1965	0935	42	725				
Apr. 27, 1965	1700	61	920				
June 2, 1965	1005	70	909				
July 7, 1965	0930	77	468				
Aug. 3, 1965	0745	74	356				
Sept. 1, 1965	0830	75	318				
Nov. 10, 1965	1255	58	384				
Dec. 13, 1965	1335	50	541				
Jan. 17, 1966	1000	34	2,530				
Feb. 16, 1966	1000	43	3,250				
May 3, 1966	1800	63	2,930				
Sept. 23, 1966	1215	68	226				
Jan. 10, 1967	1715	40	631				
Feb. 8, 1967	1040	40	3,070				
Mar. 22, 1967	0720	52	972				
Apr. 24, 1967	1315	64	921				
Aug. 30, 1967	0850	75	361				
Oct. 9, 1967	1410	66	442				
Dec. 4, 1967	1520	46	781				
Jan. 26, 1968	1020	42	725				
Mar. 12, 1968	1300	44	826				
May 14, 1968	1240	60	2,280				
June 25, 1968	1025	77	479				
Oct. 8, 1968	0810	60	398				
Dec. 4, 1968	1625	44	2,030				
Mar. 10, 1969	1400	44	1,170				
May 19, 1969	1255	62	3,340				
July 25, 1969	1440	77	464				
Sept. 22, 1969	1750	72	617				

WHITE RIVER BASIN

7-0631.3 Menorkenut Slough near Quilin, Mo.

Location.--NW¼ sec.19, T.23 N., R.8 E., at bridge on county highway, 1-3/4 mile north of Qulin, Butler County.

Drainage area.--33.5 sq mi.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--92° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 2, 1963	1440	71	0.29				
Nov. 4, 1963	1505	51	.37				
Sept. 9, 1964	1715	91	.34				
Oct. 6, 1964	1730	58	1.70				
Oct. 19, 1964	1630	59	.33				
Aug. 17, 1965	0915	83	.88				
July 5, 1966	1525	92	7.40				
Oct. 15, 1965	0840	62	2.13				
Sept. 6, 1967	0950	68	2.43				
Oct. 22, 1968	1310	64	1.51				

WHITE RIVER BASIN

7-0645. Big Creek near Yukon, Mo.

Location.--Lat 37°14'00", long 91°51",00", in SW¼NW¼ sec.5, T.29 N., R.8 W., on downstream side of right pier of bridge on State Highway 137, 3 miles south of Yukon.

Drainage area.--8.36 sq mi.

Discharge records available.--June 1949 to September 1969.

Maximum temperature measured.--79° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
July 26, 1949	1350	78	2.04
Sept. 2, 1949	1320	75	.83
Oct. 17, 1949	1355	67	3.40
Nov. 15, 1949	1325	53	.71
Dec. 4, 1949	0730	50	.61
Dec. 23, 1949	1310	36	17.9
May 29, 1950	1425	62	4.10
June 25, 1950	1720	78	1.40
July 7, 1950	1230	72	.73
Sept. 12, 1950	1430	73	1.10
Sept. 19, 1950	1130	69	.58
Oct. 18, 1950	1510	66	.29
Nov. 8, 1950	0905	56	.27
Dec. 30, 1950	1615	37	.10
Feb. 7, 1951	1145	39	23.3
Feb. 28, 1951	1410	53	12.4
Mar. 15, 1951	1830	43	12.4
Apr. 19, 1951	0900	51	5.40
May 15, 1951	1425	66	3.70
June 12, 1951	0855	72	2.20
Aug. 4, 1952	0710	70	.28
Sept. 23, 1952	0920	65	.29
Mar. 18, 1953	0850	51	32.3
Mar. 25, 1953	0830	47	9.50
Apr. 29, 1953	0935	54	3.20
June 3, 1953	0715	64	.51
Oct. 5, 1953	0750	60	.01
Jan. 4, 1954	0805	35	.01
Mar. 29, 1954	0750	53	4.40
June 8, 1956	1700	70	3.97
Feb. 17, 1961	1345	51	4.10
Mar. 20, 1961	0940	47	5.15
Apr. 27, 1961	0615	59	4.34
June 22, 1961	0725	68	.76
July 24, 1961	1045	73	1.80
Aug. 28, 1961	0920	77	.34
Nov. 3, 1961	1530	57	.45
Oct, 10, 1962	1640	66	1.50
Dec. 10, 1962	1240	43	.53
Feb. 18, 1963	1105	42	.71
Mar. 28, 1963	1705	55	2.40
Apr. 29, 1963	1400	63	1.13
July 8, 1963	1455	76	.44
Aug. 12, 1963	1600	79	.21
Feb. 3, 1964	1225	49	.06
Apr. 6, 1964	1150	57	40.6
Apr. 14, 1964	0705	48	6.60
May 18, 1964	1245	74	.55
June 22. 1964	1800	77	.09
Dec. 14, 1964	1320	47	.06
Feb. 23, 1965	0855	40	.51
Mar. 22, 1965	1520	36	1.03
Apr. 27, 1965	0925	56	2.34
June 4, 1965	1130	70	1.30
July 9, 1965	1225	72	.58
Aug. 30, 1965	1245	74	.83
Oct. 8, 1965	0955	64	1.23
Nov. 8, 1965	0955	60	.49
Dec. 17, 1965	0900	49	2.62
Mar. 25, 1966	0910	44	2.50
May 6, 1966	1145	68	5.70
June 14, 1966	1210	72	1.85
Sept. 26, 1966	1150	64	.14
Dec. 5, 1966	1125	49	.70
Jan. 13, 1967	1430	45	1.10
Feb. 23, 1967	1500	44	.84
Mar. 29, 1967	1650	57	2.10
May 5, 1967	0800	57	4.10
June 9, 1967	0915	65	.44
July 14, 1967	0915	64	.27
Oct. 6, 1967	0935	66	0
Dec. 18, 1967	1140	46	16.8
Mar. 20, 1968	1335	45	54.7
May 29, 1968	1420	64	3.34
Oct. 4, 1968	1420	64	.38
Nov. 10, 1968	1115	50	7.64
Jan. 17, 1969	1145	42	24.4
Mar. 20, 1969	1540	51	3.15
Apr. 17, 1969	1115	57	12.0
July 14, 1969	1420	75	.19

WHITE RIVER BASIN

7-0648. Sinking Creek near Round Spring, Mo.

Location.--SE¼ sec.7, T.30 N., R.4 W., at bridge on State Highway 19, 1½ miles north of Round Spring, Shannon County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 27, 1945	0905	68	51.6				
June 25, 1946	0700	70	75.7				
Oct. 8, 1946	1055	62	48.4				
Sept. 17, 1956	1640	77	12.7				
May 23, 1962	1450	74	69.7				
July 30, 1962	0845	75	43.0				
Sept. 5, 1963	1005	73	42.3				
Oct. 3, 1963	0845	39	33.7				
Nov. 6, 1963	0915	57	35.4				
Sept. 8, 1964	1200	75	31.1				
Oct. 6, 1964	0905	54	31.1				
Dec. 2, 1964	1350	43	34.3				
Aug. 19, 1965	1200	78	35.3				
Oct. 14, 1965	0840	58	42.7				
July 7, 1966	0820	77	42.3				
Nov. 8, 1966	0900	56	39.2				
Sept. 7, 1967	1015	68	38.4				
Oct. 3, 1967	1655	69	41.3				
Oct. 5, 1967	1435	70	40				

WHITE RIVER BASIN

7-0649.5 Current River at Round Spring, Mo.

Location.--NW¼ sec.20, T.30 N., R.4 W., at bridge on State Highway 19, 0.3 mile north of Round Spring, Shannon County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 27, 1945	0940	64	516				
June 25, 1946	0800	66	68.6				
Oct. 8, 1946	1210	64	483				
Sept. 17, 1956	1625	76	222				
May 23, 1962	1350	73	590				
July 30, 1962	0945	70	402				
Sept. 5, 1963	1045	68	349				
Oct. 3, 1963	0930	58	305				
Nov. 6, 1963	1000	57	314				
Sept. 8, 1964	1335	71	270				
Oct. 6, 1964	1020	54	251				
Dec. 2, 1964	1525	46	268				
Aug. 19, 1965	1000	73	259				
Oct. 14, 1965	1005	57	370				
July 6, 1966	1225	77	389				
Nov. 8, 1966	0945	58	311				
Sept. 7, 1967	0925	64	291				

WHITE RIVER BASIN

7-0652. Jacks Fork near Mountain View, Mo.

Location.--W½ sec.36, T.28 N., R.7 W., at bridge on State Highway 17, 4 miles northeast of Mountain View, Texas County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 2, 1962	0640	75	27.3				
Sept. 5, 1963	1715	77	23.0				
Oct. 3, 1963	1505	67	18.9				
Nov. 7, 1963	1115	55	23.5				
Sept. 10, 1964	0915	75	23.0				
Oct. 7, 1964	1410	61	16.9				
Dec. 1, 1964	0935	37	26.8				
Oct. 18, 1965	0820	62	27.9				
July 5, 1966	1100	81	30.2				
Sept. 6, 1967	1730	73	14.1				

7-0660. Jacks Fork at Eminence, Mo.

Location.--Lat 37°09'18", long 91°21'31", in SW¼NW¼ sec.26, T.29 N., R.4 W., on left bank 50 ft upstream from bridge on State Highway 19 at Eminence, 1½ miles downstream from Mahans Creek, and 8.0 miles upstream from mouth.

Drainage area.--398 sq mi.

Discharge records available.--October 1921 to September 1969.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 9, 1945	0920	58	234	Nov. 3, 1961	1050	57	186
Apr. 9, 1946	0845	62	528	May 22, 1962	1700	73	290
May 22, 1946	0805	58	1,380	July 30, 1962	1015	68	156
Oct. 8, 1946	1525	64	187	Oct. 8, 1962	0815	65	319
Nov. 18, 1946	1640	48	756	Dec. 13, 1962	1245	45	144
Jan. 21, 1947	1000	41	369	Feb. 20, 1963	1615	48	157
Feb. 26, 1947	0900	43	268	Mar. 25, 1963	1915	58	342
May 6, 1947	0945	62	653	May 2, 1963	1150	63	167
June 17, 1947	1535	71	241	Aug. 16, 1963	1430	72	153
June 23, 1947	1315	73	236	Sept. 16, 1963	1235	69	132
Sept. 3, 1947	0750	65	144	Oct. 26, 1963	0645	60	121
Oct. 8, 1947	0730	64	153	Nov. 25, 1963	0945	49	254
Nov. 28, 1947	1140	48	200	Jan. 7, 1964	1550	46	122
Dec. 5, 1947	1300	51	179	Feb. 6, 1964	1540	52	175
Jan. 6, 1948	0940	46	662	Apr. 23, 1964	1745	66	742
Feb. 16, 1948	1430	51	369	May 21, 1964	0745	63	235
Apr. 7, 1948	0820	61	481	June 26, 1964	0825	67	157
May 18, 1948	0905	61	469	Aug. 6, 1964	0710	67	116
Aug. 2, 1948	1355	84	176	Sept. 11, 1964	1140	66	136
Sept. 8, 1948	1230	72	171	Oct. 9, 1964	1750	60	110
Dec. 14, 1948	1010	54	167	Nov. 2, 1964	1120	60	117
Feb. 8, 1949	1525	52	727	Dec. 17, 1964	1100	45	108
Mar. 7, 1949	1045	47	429	Feb. 25, 1965	1720	45	140
Apr. 18, 1949	1000	54	420	Mar. 25, 1965	1710	43	156
May 11, 1949	1815	71	305	Apr. 28, 1965	1415	59	277
June 6, 1949	0805	67	566	June 1, 1965	1015	67	295
July 11, 1949	0900	72	1,240	July 6, 1965	1020	71	250
Aug. 19, 1949	0850	70	245	Aug. 2, 1965	0955	67	117
Sept. 29, 1949	0905	59	205	Aug. 30, 1965	1520	74	129
Oct. 5, 1949	1030	42	324	Oct. 4, 1965	1320	60	154
Dec. 2, 1949	1425	48	190	Nov. 9, 1965	1015	57	115
Dec. 12, 1949	0735	50	220	Dec. 14, 1965	0950	50	216
Apr. 1, 1950	1245	52	539	Jan. 18, 1966	1035	45	242
May 8, 1950	0810	60	694	Mar. 21, 1966	1205	58	292
July 24, 1950	0830	70	272	May 2, 1966	1345	60	848
Aug. 28, 1950	1100	71	376	June 17, 1966	1355	68	142
Oct. 11, 1950	0905	60	205	Aug. 23, 1966	0910	69	184
Nov. 13, 1950	0840	45	198	Sept. 29, 1966	1550	67	194
Jan. 4, 1951	0905	45	369	Oct. 21, 1966	1010	54	127
Feb. 12, 1951	0930	54	436	Nov. 3, 1966	1220	50	115
Mar. 21, 1951	1040	47	514	Jan. 9, 1967	1040	41	216
Mar. 30, 1951	1140	52	374	Mar. 27, 1967	1045	57	208
May 8, 1951	0915	58	470	May 1, 1967	1000	61	621
June 27, 1951	1045	80	373	June 5, 1967	1135	64	187
Aug. 6, 1951	1050	78	411	July 10, 1967	1040	69	131
Sept. 24, 1951	1155	66	368	Aug. 22, 1967	0955	65	94.5
Dec. 16, 1951	0910	39	596	Oct. 2, 1967	1050	62	99.0
July 14, 1952	0905	70	278	Dec. 11, 1967	1425	50	255
Aug. 25, 1952	0915	70	196	Feb. 6, 1968	1050	47	870
Oct. 13, 1952	0915	58	169	May 21, 1968	1140	59	299
Jan. 12, 1953	0755	43	178	July 8, 1968	1135	73	142
Feb. 23, 1953	0745	44	252	Aug. 21, 1968	1050	71	130
Apr. 6, 1953	0845	53	309	Oct. 3, 1968	1810	62	140
May 18, 1953	0850	62	544	Nov. 27, 1968	1335	50	384
July 13, 1953	0840	70	137	Jan. 16, 1969	1520	48	344
Aug. 10, 1953	1110	76	115	Mar. 17, 1969	1235	52	350
Sept. 21, 1953	0820	65	113	Apr. 14, 1969	1140	55	1,130
Nov. 9, 1953	0630	49	115	June 2, 1969	1240	64	251
Dec. 14, 1953	0735	47	124	July 17, 1969	0925	72	162
Jan. 25, 1954	0915	46	157	Sept. 18, 1969	1420	68	168
May 13, 1954	0955	65	210				
Sept. 16, 1954	0710	67	77.4				
Feb. 17, 1961	1200	53	301				
Mar. 20, 1961	1215	51	505				
Apr. 27, 1961	1645	66	452				
June 22, 1961	0805	68	267				
July 24, 1961	1700	77	218				
Aug. 22, 1961	1130	61	177				

WHITE RIVER BASIN

7-0665. Current River near Eminence, Mo.

Location.--Lat 37°11'00", long 91°15'30", in SW¼NE¼ sec.15, T.29 N., R.3 W., on right bank 1 mile downstream from Jacks Fork, 8 miles northeast of Eminence, and at mile 123.0.

Drainage area.--1,272 sq mi.

Discharge records available.--August 1921 to September 1969.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 26, 1947	1135	43	960
June 17, 1947	1325	69	1,070
July 29, 1947	1100	70	828
Sept. 3, 1947	1000	71	701
Oct. 8, 1947	1200	66	642
Aug. 2, 1948	0935	72	836
Sept. 7, 1948	1620	73	766
Nov. 3, 1948	1300	59	1,110
Sept. 29, 1949	1135	61	797
Oct. 5, 1949	1430	46	1,280
Dec. 2, 1949	1250	47	799
Oct. 11, 1950	1515	63	841
Dec. 18, 1950	0930	39	684
May 8, 1951	1225	56	1,460
July 14, 1952	1115	71	1,260
Aug. 25, 1952	1300	73	749
Jan. 12, 1953	0935	42	700
Feb. 23, 1953	1140	45	880
Apr. 6, 1953	1030	53	1,090
Aug. 10, 1953	1325	75	508
Sept. 21, 1963	1050	70	455
Nov. 9, 1953	1030	47	493
Dec. 14, 1953	1035	46	482
Jan. 25, 1954	1220	45	542
May 13, 1954	1200	65	644
Feb. 17, 1961	1005	53	874
June 22, 1961	1620	69	1,070
Nov. 3, 1961	1200	59	755
July 30, 1962	1130	75	634
Oct. 8, 1962	1055	64	966
Dec. 13, 1962	1055	37	525
Mar. 25, 1963	1600	58	1,180
May 2, 1963	0915	59	770
Aug. 16, 1963	1130	72	728
Sept. 16, 1963	1400	70	517
Oct. 25, 1963	1315	64	461
Nov. 25, 1963	1100	48	815
Jan. 7, 1964	1520	44	486
Feb. 6, 1964	1500	49	585
May 21, 1964	1000	67	865
June 26, 1964	1015	71	555
Aug. 5, 1964	1510	80	528
Sept. 11, 1964	1355	72	467
Oct. 14, 1964	0805	59	462
Nov. 2, 1964	1630	59	445
Dec. 17, 1964	1240	42	432
Jan. 21, 1965	1325	45	432
Feb. 25, 1965	1530	47	471
Mar. 25, 1965	1620	48	524
Apr. 29, 1965	1430	62	859
June 1, 1965	1255	70	1,000
July 6, 1965	1420	74	644
Aug. 2, 1965	1240	73	426
Aug. 31, 1965	0850	71	440
Oct. 4, 1965	1530	59	766
Nov. 9, 1965	1240	58	474
Dec. 14, 1965	1200	47	645
Jan. 18, 1966	1115	41	833
Feb. 15, 1966	1505	46	3,020
Mar. 21, 1966	1245	59	1,010
June 17, 1966	1130	69	878
Aug. 23, 1966	1030	76	760
Sept. 29, 1966	1150	63	1,270
Oct. 19, 1966	0910	54	527
Oct. 20, 1966	1725	56	718
Jan. 9, 1967	1430	41	731
Feb. 13, 1967	1425	50	1,110
Mar. 27, 1967	1400	58	1,180
May 1, 1967	1500	62	3,010
June 5, 1967	1430	67	817
July 10, 1967	1345	76	589
Aug. 22, 1967	1215	70	457
Oct. 2, 1967	1255	62	461
Dec. 12, 1967	0925	46	2,660
Feb. 6, 1968	1300	47	3,240
May 21, 1968	1430	60	1,180
Aug. 21, 1968	1330	75	571
Oct. 3, 1968	1630	65	540
Dec. 2, 1968	1255	49	2,830
Jan. 17, 1969	0835	48	1,390
Mar. 17, 1969	1500	51	1,420
Apr. 14, 1969	1430	57	3,190
June 2, 1969	1530	68	1,000
July 17, 1969	1135	75	779
Sept. 18, 1969	1230	66	792

WHITE RIVER BASIN

7-0670. Current River at Van Buren, Mo.

Location.--Lat 36°59'30", long 91°00'55", in NE¼NW¼ sec.25, T.27 N., R.1 W., near right bank on downstream side of pier of bridge on U. S. Highway 60 in Van Buren, 0.4 miles downstream from Pike Creek, 4.7 miles upstream from Big Spring, and at mile 90.4

Drainage area.--1,667 sq mi.

Discharge records available.--October 1912 to September 1969. Prior to July 1921 monthly discharge only, published in WSP 1311.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 28, 1945	1000	81	1,120
Apr. 10, 1946	0805	58	1,940
Jan. 21, 1947	1615	40	1,720
Feb. 27, 1947	0815	42	1,260
Apr. 2, 1947	0645	44	1,490
June 18, 1947	0815	70	1,410
July 30, 1947	0645	70	1,020
Sept. 3, 1947	1445	72	965
Oct. 9, 1947	1030	67	863
Nov. 29, 1947	1220	47	1,070
Aug. 3, 1948	0805	82	1,050
Sept. 14, 1948	1230	72	831
Nov. 4, 1948	1420	61	1,220
Dec. 15, 1948	1040	55	1,490
Aug. 20, 1949	1430	75	1,350
Sept. 29, 1949	1350	61	1,040
Nov. 6, 1949	1400	53	1,510
Oct. 12, 1950	1630	62	1,080
Aug. 7, 1951	1115	76	1,920
Sept. 24, 1951	1605	66	2,170
July 14, 1952	1415	76	1,480
Aug. 25, 1952	1435	73	1,000
Oct. 13, 1952	1320	64	890
Jan. 12, 1953	1215	41	1,100
Apr. 6, 1953	1430	53	1,390
July 13, 1953	1430	71	789
Aug. 11, 1953	0830	74	712
Sept. 22, 1953	0840	65	649
Nov. 10, 1953	0950	46	636
Dec. 14, 1953	1600	43	639
Jan. 26, 1954	1200	52	742
Sept. 14, 1954	1340	78	483
July 27, 1961	1445	75	1,320
Sept. 1, 1961	1230	80	1,010
Oct. 30, 1961	1130	62	774
July 30, 1962	1250	78	849
Oct. 8, 1962	1245	68	1,240
Mar. 26, 1963	1035	55	1,550
May 1, 1963	1625	62	1,040
Aug. 16, 1963	0930	69	1,040
Sept. 16, 1963	1610	71	697
Oct. 24, 1963	1235	63	628
Nov. 25, 1963	1240	49	1,290
Jan. 8, 1964	1010	42	645
Feb. 6, 1964	1240	50	807
May 20, 1964	1425	73	1,060
June 25, 1964	1625	72	762
Aug. 5, 1964	1040	80	711
Sept. 11, 1964	0710	73	602
Oct. 9, 1964	1425	61	602
Nov. 3, 1964	0750	57	584
Dec. 16, 1964	1710	44	587
Jan. 21, 1965	1035	43	573
Feb. 25. 1965	1045	47	707
Mar. 25, 1965	1120	50	705
Apr. 29, 1965	0720	57	1,170
June 1, 1965	1415	71	1,410
July 6, 1965	1815	75	851
Aug. 2, 1965	1505	74	590
Aug. 31, 1965	1240	72	644
Oct. 5, 1965	0915	58	1,020
Nov. 9, 1965	1600	59	675
Dec. 14, 1965	1550	50	926
Jan. 18, 1966	1505	41	1,110
Feb. 16, 1966	0955	46	3,610
May 3, 1966	1240	62	3,280
Aug. 23, 1966	1400	74	1,090
Sept. 28, 1966	1530	63	2,430
Jan. 10, 1967	0855	39	1,030
Feb. 14, 1967	1000	48	1,470
Mar. 28, 1967	1000	59	1,400
May 2, 1967	0940	60	3,080
June 6, 1967	0945	68	1,090
July 11, 1967	0930	77	816
Aug. 22, 1967	1545	73	619
Oct. 2, 1967	1630	64	655
Feb. 8, 1968	1020	44	3,150
Mar. 21, 1968	1250	45	9,550
May 22, 1968	1020	59	1,500
July 9, 1968	0920	73	912
Oct. 3, 1968	0940	64	742
Dec. 2, 1968	1710	49	3,280
Jan. 21, 1969	1115	46	2,420
Mar. 18, 1969	1125	50	1,840
June 3, 1969	1015	64	1,400
July 16, 1969	1500	80	1,070
Sept. 18, 1969	0850	65	881

WHITE RIVER BASIN

7-0680. Current River at Doniphan, Mo.

LOCATION.--Lat 36°37'25", long 90°50'55", in NW¼NW¼ sec.27, T.23 N., R.2 E., on right bank half a mile upstream from U. S. Highway 160, 1 mile west of Doniphan, 2½ miles upstream from Briar Creek, and at mile 51.3.

DRAINAGE AREA.--2,038 sq mi.

DISCHARGE RECORDS AVAILABLE.--October 1918 to September 1969. Prior to July 1921 monthly discharge only, published in WSP 1311.

TEMPERATURE RECORDS AVAILABLE.--March 1965 to September 1969, continuous ethyl alcohol-actuated thermograph, prior to March 1965, occasional temperature observations.

MAXIMUM TEMPERATURE MEASURED.--81° Fahrenheit.

TEMPERATURE (°F) OF WATER, MARCH TO SEPTEMBER 1965

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	52	50	48	50	50	53	53	55	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	50	48	48	48	50	50	53	53	--
APRIL																																
MAXIMUM	57	57	57	55	56	58	60	61	61	61	63	63	63	63	61	61	61	62	62	62	63	65	66	67	67	66	62	60	60	63	--	61
MINIMUM	55	57	55	54	54	56	58	60	61	61	61	62	62	61	60	59	60	60	61	60	61	63	64	65	66	62	60	59	58	59	--	60
MAY																																
MAXIMUM	64	66	67	67	69	69	70	71	71	68	68	68	69	69	69	70	71	73	73	70	71	71	72	72	72	72	72	71	70	70	71	70
MINIMUM	61	63	64	65	67	68	67	69	68	67	67	67	67	67	67	69	69	71	70	69	69	69	71	71	71	70	69	70	68	68	69	68
JUNE																																
MAXIMUM	72	73	73	73	73	73	72	72	72	73	73	74	74	70	70	71	71	72	72	73	74	76	76	76	76	75	76	78	79	79	--	74
MINIMUM	71	72	72	70	72	72	71	71	71	72	72	72	70	69	68	69	69	69	70	70	71	73	74	72	73	73	74	76	76	77	--	72
JULY																																
MAXIMUM	78	78	78	75	78	78	76	76	76	76	76	77	78	78	78	77	78	77	76	74	73	76	78	79	79	76	75	75	74	73	72	76
MINIMUM	76	74	75	73	74	75	74	74	75	74	74	74	74	75	75	74	74	76	74	72	70	73	75	76	76	74	74	74	72	70	69	74
AUGUST																																
MAXIMUM	72	72	75	76	76	76	76	75	75	75	76	76	75	78	79	79	79	79	79	76	76	76	76	76	77	78	77	75	73	72	72	76
MINIMUM	70	70	71	72	73	74	74	72	72	72	73	73	73	74	76	77	77	77	76	74	74	74	75	74	74	76	75	72	70	69	69	73
SEPTEMBER																																
MAXIMUM	71	71	71	71	72	72	71	73	74	74	72	69	70	72	72	71	72	73	73	73	72	70	67	66	64	62	63	63	63	64	--	70
MINIMUM	69	69	68	70	70	70	69	70	72	72	69	68	69	69	70	69	71	71	71	72	70	67	66	64	62	62	62	62	63	63	--	68

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	64	63	63	62	60	59	60	60	59	60	59	59	58	58	60	62	63	63	63	62	61	58	56	55	55	54	54	55	55	54	56	59
MINIMUM	63	62	61	60	59	58	58	58	58	57	58	57	56	56	58	60	62	62	62	61	58	56	54	54	53	53	53	54	54	53	54	57
NOVEMBER																																
MAXIMUM	56	56	55	56	58	58	59	60	60	59	56	55	55	54	54	57	56	52	51	50	52	53	53	53	53	56	56	53	50	47	--	55
MINIMUM	55	54	54	55	56	58	58	59	59	56	55	55	54	54	54	54	52	51	50	50	51	52	53	53	53	53	53	50	47	46	--	53
DECEMBER																																
MAXIMUM	46	45	48	48	48	48	48	46	46	48	50	52	52	51	50	50	49	48	47	46	46	46	48	50	50	48	46	45	44	47	51	48
MINIMUM	44	44	46	48	47	48	46	44	45	46	48	50	51	50	50	49	48	47	46	46	45	45	46	48	48	46	45	44	43	44	47	47
JANUARY																																
MAXIMUM	51	51	49	47	47	47	47	47	46	46	46	46	46	47	46	46	46	45	45	44	44	44	44	43	43	43	44	44	42	39	38	45
MINIMUM	51	49	47	47	47	47	47	46	45	45	46	46	46	46	46	46	45	45	44	44	44	44	43	43	43	43	43	42	39	38	38	45
FEBRUARY																																
MAXIMUM	38	39	40	41	42	44	46	48	49	49	48	48	49	49	49	49	49	49	49	48	49	47	47	47	50	50	50	50	--	--	--	47
MINIMUM	38	38	39	40	42	42	44	46	48	48	46	48	48	49	49	49	48	49	48	48	47	47	47	47	47	50	50	50	--	--	--	46
MARCH																																
MAXIMUM	51	52	54	54	55	50	50	51	51	53	55	56	56	56	58	62	62	63	62	58	62	62	61	58	55	55	55	53	55	56	58	56
MINIMUM	50	51	52	53	50	50	48	50	50	51	53	55	56	55	55	58	62	62	58	58	58	61	58	55	52	53	53	51	53	54	56	54
APRIL																																
MAXIMUM	59	59	58	57	57	54	55	56	57	57	57	56	56	56	56	56	58	58	57	57	58	58	56	56	57	57	59	60	60	61	--	57
MINIMUM	57	57	57	56	54	52	52	55	55	55	55	56	54	53	55	55	55	57	56	56	57	56	56	56	56	57	57	59	60	60	--	56
MAY																																
MAXIMUM	61	60	61	63	64	65	66	68	68	65	63	62	62	61	61	63	65	65	65	65	64	66	66	65	65	65	65	67	67	67	66	64
MINIMUM	60	59	60	61	63	64	65	66	65	63	51	61	61	61	61	61	63	65	65	63	63	63	65	65	63	63	63	65	66	65	64	63
JUNE																																
MAXIMUM	64	64	66	66	67	67	67	68	70	69	68	69	69	69	69	70	70	71	71	72	73	74	75	75	76	76	75	76	77	77	--	71
MINIMUM	63	63	64	65	65	66	66	66	68	67	66	67	69	67	68	69	68	69	69	69	71	71	71	72	73	74	73	73	74	75	--	69
JULY																																
MAXIMUM	77	77	76	77	78	79	80	79	78	79	79	79	80	80	79	78	76	77	77	76	75	74	74	72	73	75	76	76	76	75	75	77
MINIMUM	75	74	74	74	75	76	77	76	76	76	76	76	77	77	77	75	74	75	76	74	73	71	72	70	69	72	72	73	73	72	73	74
AUGUST																																
MAXIMUM	75	75	74	74	73	74	74	74	75	74	74	73	71	73	73	72	74	75	75	76	74	74	74	73	71	71	71	71	71	72	72	73
MINIMUM	73	73	71	71	71	72	72	71	72	73	73	70	70	71	71	71	72	73	73	74	72	72	72	70	68	69	70	70	70	70	71	71
SEPTEMBER																																
MAXIMUM	74	74	74	72	71	72	70	69	68	68	69	68	71	70	70	68	66	65	65	65	64	65	65	65	65	65	64	64	64	63	--	68
MINIMUM	71	72	72	71	70	70	68	67	67	68	68	68	68	70	68	66	64	64	64	64	63	63	63	64	64	64	64	63	63	61	--	66

WHITE RIVER BASIN

7-0680. Current River at Doniphan, Mo.--Continued

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	61	60	60	62	62	61	60	60	63	63	63	62	62	62	62	61	58	56	56	55	54	55	55	55	54	54	54	54	55	56	56	58
MINIMUM	59	59	59	60	61	59	58	59	60	62	60	60	62	62	61	58	56	56	55	54	53	54	55	54	53	53	53	53	54	55	55	57
NOVEMBER																																
MAXIMUM	55	52	49	48	50	49	52	55	57	57	55	53	52	51	51	51	53	54	54	54	52	53	54	56	56	56	56	52	49	48	—	52
MINIMUM	52	49	47	47	48	49	49	52	55	55	53	52	51	50	50	50	51	53	54	52	52	52	53	54	56	56	52	49	48	48	—	51
DECEMBER																																
MAXIMUM	48	46	45	44	46	49	54	56	56	53	49	47	46	45	44	44	46	47	47	47	47	46	46	42	40	40	40	41	41	40	40	45
MINIMUM	46	45	44	44	44	44	49	54	53	49	47	45	45	44	44	44	44	46	46	46	46	45	42	40	39	39	40	39	40	40	40	44
JANUARY																																
MAXIMUM	42	42	42	42	42	43	43	43	41	40	41	42	43	45	45	45	43	42	40	40	43	48	51	53	53	53	51	47	45	47	49	44
MINIMUM	40	42	42	42	42	42	43	41	40	40	39	41	42	43	44	43	42	40	39	39	40	43	48	51	53	50	47	45	45	45	47	43
FEBRUARY																																
MAXIMUM	50	50	49	46	46	46	46	45	44	46	46	46	47	47	50	50	45	44	44	46	46	45	44	42	42	42	42	45	--	--	—	45
MINIMUM	49	49	47	45	45	45	44	44	44	44	45	45	46	47	47	45	44	43	43	44	45	44	42	41	41	42	42	42	--	--	—	44
MARCH																																
MAXIMUM	46	49	51	52	52	51	45	46	47	50	53	58	58	59	59	56	54	53	51	50	53	55	57	59	60	61	61	62	63	64	64	54
MINIMUM	45	46	50	51	51	45	44	45	45	47	50	53	57	58	56	54	53	51	50	50	50	53	55	57	59	60	61	61	61	62	64	53
APRIL																																
MAXIMUM	66	68	67	64	67	68	69	68	69	69	67	65	64	67	67	67	69	69	67	66	65	66	66	66	62	60	66	60	60	60	--	65
MINIMUM	63	65	63	61	63	67	67	67	67	67	64	64	63	63	66	67	67	67	65	64	64	64	62	61	60	59	58	59	60	60	—	63
MAY																																
MAXIMUM	61	61	61	61	61	60	61	63	63	64	69	69	63	62	62	61	62	64	66	67	64	65	66	68	71	72	72	73	73	74	72	65
MINIMUM	60	60	59	59	60	60	59	61	61	63	64	63	62	62	61	61	61	62	64	64	62	62	63	65	68	70	71	71	71	72	69	63
JUNE																																
MAXIMUM	69	67	67	70	71	72	73	75	75	75	75	75	76	78	78	78	79	78	78	76	74	75	77	76	75	73	72	72	71	72	—	74
MINIMUM	67	65	64	67	69	70	70	72	72	73	73	73	73	75	76	75	76	76	75	74	73	72	73	75	72	70	71	70	70	71	—	71
JULY																																
MAXIMUM	73	75	75	75	75	70	70	74	77	79	80	79	77	76	74	73	74	75	76	77	78	78	80	80	80	78	80	80	80	80	80	76
MINIMUM	71	72	72	72	69	68	68	69	73	75	76	76	75	71	71	70	70	71	72	74	74	76	75	77	78	75	77	77	76	76	77	73
AUGUST																																
MAXIMUM	81	79	78	79	78	78	78	78	78	77	75	73	73	73	74	74	75	75	74	74	73	73	73	74	74	74	74	72	72	72	69	74
MINIMUM	78	76	76	76	76	74	74	77	76	75	73	70	69	69	70	71	72	73	72	70	69	70	70	71	72	73	71	69	69	69	68	72
SEPTEMBER																																
MAXIMUM	69	68	69	69	70	71	71	71	71	72	72	71	69	69	69	68	71	72	71	72	73	73	71	71	70	69	69	66	62	62	—	69
MINIMUM	66	66	66	67	69	69	70	70	69	70	69	69	69	68	68	68	68	71	70	71	71	70	68	68	67	67	66	62	59	59	—	67

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
OCTOBER																																
MAXIMUM	64	64	65	68	70	70	68	68	65	63	60	57	58	61	63	63	60	58	56	56	56	56	56	57	56	55	54	54	53	53	53	60
MINIMUM	61	63	63	65	67	68	67	65	63	60	57	56	56	58	61	60	58	56	55	55	55	55	55	56	55	53	53	52	52	52	53	58
NOVEMBER																																
MAXIMUM	53	52	52	50	48	47	45	45	47	48	51	53	53	52	51	50	50	50	50	48	50	50	50	49	48	47	47	45	43	43	—	49
MINIMUM	52	52	50	47	47	45	44	44	45	47	48	51	51	51	50	49	49	50	48	48	48	50	49	48	47	47	45	43	43	43	—	48
DECEMBER																																
MAXIMUM	43	45	46	46	46	48	49	49	51	53	53	51	49	49	47	47	48	49	49	49	53	53	49	47	48	48	48	47	46	45	45	48
MINIMUM	43	43	45	45	45	46	48	48	49	51	51	49	49	47	47	47	47	48	49	49	49	49	47	47	47	48	47	46	45	45	45	47
JANUARY																																
MAXIMUM	45	44	44	44	44	44	43	40	40	41	41	41	41	40	41	41	42	43	44	45	46	47	47	46	45	45	46	48	50	50	50	45
MINIMUM	44	44	44	44	44	43	40	40	40	40	41	41	40	40	40	41	41	42	43	44	45	46	46	45	44	44	45	46	48	50	50	43
FEBRUARY																																
MAXIMUM	50	50	48	47	46	47	47	47	47	46	46	46	45	45	46	47	47	48	48	48	48	46	45	45	46	46	48	50	50	—	--	47
MINIMUM	50	48	47	46	46	46	47	47	46	46	45	45	45	45	45	46	46	47	48	48	46	45	45	45	45	46	46	48	49	--	--	46
MARCH																																
MAXIMUM	49	50	50	49	50	52	52	53	55	55	54	51	48	48	49	52	53	52	52	52	50	48	47	47	50	52	55	55	58	59	59	52
MINIMUM	47	48	49	47	47	50	50	51	53	54	51	47	46	48	48	49	52	52	52	50	48	46	47	46	47	50	52	55	55	58	57	50
APRIL																																
MAXIMUM	57	55	53	53	53	50	51	54	54	56	57	58	58	60	59	58	59	60	60	59	58	58	56	57	56	57	59	59	59	60	--	57
MINIMUM	55	53	53	53	50	49	49	51	54	54	56	56	57	57	57	56	57	59	59	58	58	56	55	55	55	56	57	58	58	59	—	55
MAY																																
MAXIMUM	61	63	63	63	63	61	61	62	64	64	61	60	60	63	64	65	65	62	62	62	60	60	61	61	61	62	62	61	62	62	63	62
MINIMUM	60	61	63	61	61	59	60	61	62	61	60	60	60	60	63	64	62	60	60	60	59	59	59	61	61	60	60	60	61	61	62	60
JUNE																																
MAXIMUM	65	65	66	67	68	69	70	71	72	74	74	73	72	72	73	74	72	71	72	72	73	74	74	74	73	73	71	72	75	77	--	72
MINIMUM	63	64	64	65	67	68	68	68	69	71	72	70	70	69	71	72	70	69	70	68	70	71	70	70	72	71	68	68	70	74	—	69
JULY																																
MAXIMUM	77	77	75	73	72	71	73	74	74	75	75	74	74	73	74	76	76	76	77	78	78	77	78	78	78	78	80	80	78	77	78	76
MINIMUM	74	74	71	69	69	69	69	71	71	72	72	70	70	71	71	72	73	74	73	75	75	76	75	76	76	74	76	77	75	75	75	73
AUGUST																																
MAXIMUM	77	74	77	77	78	78	78	78	78	77	76	75	73	72	73	76	76	77	77	77	77	77	77	78	76	77	74	71	69	66	66	75
MINIMUM	74	72	73	75	75	76	76	76	76	75	73	73	72	71	72	73	74	74	74	75	75	75	74	75	75	72	70	67	66	65	66	73
SEPTEMBER																																
MAXIMUM	67	68	68	67	67	67	67	68	67	66	66	66	66	66	66	63	63	65	66	68	68	69	71	71	69	67	68	68	69	69	--	67
MINIMUM	65	65	66	66	66	65	65	65	65	63	63	63	63	63	63	63	63	62	64	65	66	68	68	69	66	64	65	65	66	67	—	65

7-0680, Current River at Doniphan, Mo.--Continued

TEMPERATURE (°F) OF WATER, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVER-AGE
OCTOBER																																
MAXIMUM	69	69	68	67	64	62	61	61	61	60	59	63	64	65	66	66	66	65	62	60	60	60	60	57	56	55	56	56	55	55	57	61
MINIMUM	67	67	67	63	62	61	60	59	60	58	58	59	63	63	64	65	65	62	59	58	58	59	57	56	55	53	55	55	53	53	55	60
NOVEMBER																																
MAXIMUM	57	57	57	57	56	55	55	54	53	51	50	49	49	48	50	50	50	51	50	49	47	48	50	51	51	50	50	50	50	50	--	52
MINIMUM	57	57	57	56	55	55	54	53	51	50	49	49	47	47	48	50	50	50	49	47	47	47	48	50	50	50	50	50	50	49	--	51
DECEMBER																																
MAXIMUM	49	49	49	49	49	48	47	46	44	44	44	47	47	46	44	43	43	45	46	46	46	46	45	44	44	44	47	47	48	48	48	46
MINIMUM	49	49	49	49	48	47	46	44	44	44	44	44	46	44	43	42	42	43	45	46	46	46	44	44	43	43	45	47	47	48	48	45
JANUARY																																
MAXIMUM	49	48	48	48	48	48	48	49	49	49	47	47	47	47	48	49	49	50	51	50	49	48	48	48	45	44	42	44	47	47	46	48
MINIMUM	48	47	47	48	47	47	48	48	49	47	47	46	46	47	47	48	49	49	50	49	48	48	48	45	44	42	42	42	44	46	45	47
FEBRUARY																																
MAXIMUM	46	47	47	47	47	48	48	48	48	48	48	49	49	48	47	46	47	47	47	47	48	48	49	50	50	50	50	49	--	--	--	48
MINIMUM	45	46	47	47	47	47	48	48	48	48	48	48	48	47	46	46	46	47	47	47	47	48	48	49	50	50	49	49	--	--	--	47
MARCH																																
MAXIMUM	49	49	49	50	50	50	50	50	50	49	49	49	49	49	49	50	53	55	56	58	58	58	57	54	53	51	51	52	52	52	53	52
MINIMUM	48	49	48	49	49	50	49	50	48	48	48	48	48	48	49	49	50	53	54	56	56	56	54	52	51	50	50	50	52	52	52	50
APRIL																																
MAXIMUM	55	55	56	56	56	57	56	57	58	58	57	56	56	55	56	58	58	58	58	56	57	58	58	57	57	59	59	59	58	57	--	57
MINIMUM	53	55	55	55	56	56	56	56	57	57	55	55	55	55	56	56	58	58	56	55	56	57	57	56	56	57	58	58	57	56	--	56
MAY																																
MAXIMUM	57	58	59	58	60	60	61	60	60	58	57	58	59	62	64	64	63	61	60	61	62	64	64	64	64	65	67	69	69	70	73	62
MINIMUM	56	56	57	57	58	59	60	59	58	56	55	56	58	59	62	63	61	60	59	58	61	62	63	63	62	63	65	66	68	69	70	61
JUNE																																
MAXIMUM	73	71	70	68	70	72	74	74	73	69	73	74	74	74	73	70	68	70	72	72	69	71	72	73	76	77	77	78	79	79	--	73
MINIMUM	71	69	69	66	68	70	70	72	68	67	69	72	73	73	70	67	67	68	68	69	68	68	71	71	73	76	76	74	76	76	--	70
JULY																																
MAXIMUM	79	77	76	79	79	79	79	80	81	81	81	81	81	80	80	80	80	77	77	76	74	74	74	73	74	76	75	--	--	--	70	78
MINIMUM	76	74	72	75	77	77	77	77	78	79	79	79	78	77	77	76	76	76	75	73	73	72	72	71	71	73	73	--	--	--	68	75
AUGUST																																
MAXIMUM	71	72	68	69	70	72	71	72	74	73	73	71	71	71	73	70	69	70	72	72	72	70	70	70	70	69	70	70	70	70	70	71
MINIMUM	68	68	64	66	66	67	68	69	70	70	70	69	68	68	68	69	68	69	69	70	70	68	68	68	68	68	67	67	68	67	68	68
SEPTEMBER																																
MAXIMUM	70	69	68	68	69	70	70	70	69	67	66	67	67	67	68	68	68	67	66	65	65	66	66	66	66	65	65	65	64	64	--	67
MINIMUM	68	68	68	67	67	68	68	69	67	65	63	64	65	65	66	67	67	65	65	64	65	65	66	64	64	63	63	63	62	62	--	65

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 1, 1945	0725	75	1,810				
Oct. 17, 1946	1015	61	1,460				
June 22, 1947	1445	71	2,010				
Sept. 9, 1947	0655	74	1,300				
Dec. 4, 1947	0930	50	1,540				
Aug. 10, 1948	1430	79	1,440				
Nov. 11, 1949	1200	53	2,080				
Jan. 30, 1954	1515	47	1,220				
Apr. 17, 1963	1405	65	1,610				
Aug. 15, 1963	1345	72	1,750				
Sept. 10, 1964	1445	77	1,150				
Nov. 3, 1964	1430	59	1,070				
Dec. 16, 1964	1410	43	1,210				

WHITE RIVER BASIN

7-0685. Little Black River near Fairdealing, Mo.

Location.--Lat 36°39'40", long 90°34'25", in NW¼NW¼ sec.7, T.23 N., R.5 E., at bridge on State Highway 14, 2½ miles downstream from Beaver Dam Creek, and 2½ miles east of Fairdealing.

Drainage area.--187 sq mi.

Discharge records available.—October 1939 to September 1942 (discontinued). Discharge measurements only October 1954 to September 1969.

Maximum temperature measured.--78° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 18, 1961	1720	56	23.9				
Oct. 2, 1963	1100	60	22.8				
Nov. 4, 1963	1100	51	30.4				
Sept. 9, 1964	1415	75	45.0				
Oct. 19, 1964	1220	57	50.3				
Aug. 17, 1965	1215	75	23.1				
Oct. 15, 1965	1110	59	47.9				
July 6, 1966	0820	78	36.0				
Nov. 4, 1966	0905	44	40.6				
Sept. 5, 1967	1600	67	27.1				
Oct. 22, 1968	1040	56	48.6				

WHITE RIVER BASIN

7-0691.5 Spring River at Thayer, Mo.

__Location.__—NW¼ sec.32, T.22 N., R.5 W., at bridge on State Highway 142 in Thayer, Oregon County.

__Drainage area.__—Not determined.

__Discharge records available.__—Discharge measurements only.

__Maximum temperature measured.__—81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 19, 1961	0730	56	6.89				
July 31, 1962	1645	81	16.8				
Sept. 5, 1963	1325	79	2.29				
Oct. 3, 1963	1130	67	1.45				
Nov. 6, 1963	1645	60	.74				
Sept. 9, 1964	0810	74	5.82				
Oct. 7, 1964	1125	56	6.75				
Dec. 2, 1964	0830	40	9.32				
Aug. 18, 1965	0830	77	7.12				
Oct. 18, 1965	1150	64	10.8				
July 6, 1966	1300	76	46.2				
Nov. 2, 1966	1025	45	9.17				
Sept. 5, 1967	1640	70	6.00				
July 14, 1969	1440	78	44.1				
Sept. 16, 1969	1340	70	13.3				

WHITE RIVER BASIN

7-0705. Eleven Point River near Thomasville, Mo.

Location.--Lat 36°47'05", long 91°29'30", NE¼NE¼ sec.3, T.24 N., R.5 W., on left bank attached to bluff at end of Grandpappy Ridge, 500 ft upstream from Posy Spring, 1½ miles downstream from Barren Fork, and 2½ miles east of Thomasville. River mile, 86.5.

Drainage area.--361 sq mi.

Discharge records available.--October 1950 to September 1969.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 22, 1950	1400	56	34.9
Dec. 21, 1950	1515	44	22.6
Jan. 12, 1951	1155	44	34.4
Feb. 17, 1951	1605	46	236
July 19, 1952	1520	62	52.0
Aug. 31, 1952	0735	73	26.1
Jan. 18, 1953	1150	43	22.5
Apr. 10, 1953	1540	61	55.3
July 19, 1953	0550	66	13.7
Aug. 17, 1953	1230	74	9.09
Sept. 26, 1953	0855	66	7.67
Jan. 31, 1954	1430	47	9.42
May 3, 1954	0845	58	448
May 19, 1954	0800	54	34.0
Sept. 15, 1954	1235	73	3.18
Feb. 16, 1961	1645	53	17.1
Mar. 21, 1961	1800	52	117
Apr. 27, 1961	1125	63	119
May 19, 1961	0900	56	212
June 22, 1961	0935	65	83.0
Aug. 29, 1961	1000	77	23.2
Nov. 2, 1961	1530	65	11.7
July 31, 1962	1450	79	15.5
Oct. 9, 1962	1405	66	13.6
Dec. 11, 1962	1350	40	7.31
Feb. 19, 1963	1030	45	7.99
Mar. 27, 1963	1200	54	25.6
Apr. 30, 1963	1715	61	10.5
July 9, 1963	1600	68	30.9
Aug. 14, 1963	1415	76	12.3
Sept. 17, 1963	1415	71	7.09
Oct. 22, 1963	1800	63	6.53
Nov. 26, 1963	1150	50	10.4
Jan. 6, 1964	1710	43	6.54
Apr. 22, 1964	0810	61	68.1
May 19, 1964	1355	73	35.4
June 24, 1964	1205	72	27.9
Aug. 4, 1964	1325	80	9.18
Sept. 10, 1964	0720	70	9.34
Oct. 8, 1964	1355	61	9.10
Nov. 4, 1964	1445	58	7.59
Jan. 20, 1965	1035	41	11.3
Feb. 24, 1965	0930	49	14.8
Mar. 23, 1965	1810	38	18.5
Apr. 30, 1965	1100	66	43.6
June 3, 1965	1115	77	16.8
Aug. 4, 1965	0815	69	8.55
Sept. 1, 1965	1830	74	9.56
Oct. 6, 1965	1530	59	10.7
Nov. 12, 1965	1445	60	6.99
Jan. 20, 1966	1215	41	34.6
Mar. 23, 1966	1615	58	39.8
May 4, 1966	1650	65	245
June 15, 1966	1610	70	55.3
Aug. 25, 1966	1245	68	20.5
Sept. 27, 1966	1340	65	18.2
Nov. 2, 1966	1255	46	7.85
Dec. 7, 1966	1125	53	12.7
Jan. 13, 1967	0930	42	12.0
Feb. 15, 1967	1230	51	19.9
Mar. 29, 1967	1250	65	14.6
May 3, 1967	1100	59	12.4
June 7, 1967	1315	71	14.2
July 12, 1967	1205	74	7.14
Aug. 24, 1967	1730	75	4.82
Oct. 4, 1967	1220	64	5.20
Feb. 8, 1968	1405	44	142
May 23, 1968	0935	59	146
July 9, 1968	1700	77	28.4
Aug. 23, 1968	1130	75	20.4
Oct. 2, 1968	0955	65	27.8
Oct. 16, 1968	1130	62	19.9
Dec. 3, 1968	1545	49	256
Jan. 15, 1969	0930	44	119
Mar. 19, 1969	1420	56	114
Apr. 16, 1969	0915	55	438
July 18, 1969	0835	74	32.7

WHITE RIVER BASIN

7-0715. Eleven Point River near Bardley, Mo.

Location.--Lat 36°38'55", long 91°12'03", in NE¼SE¼ sec.17, T.23 N., R.2 W., on downstream side of right pier of main truss of bridge on U. S. Highway 160, 7 miles southwest of Bardley, and 7½ miles upstream from Fredericks Fork, River mile 53.7.

Drainage area.--793 sq mi.

Discharge records available.--October 1921 to September 1969.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 14, 1945	0810	58	635
Oct. 18, 1946	0810	58	455
Nov. 17, 1946	1125	49	786
Jan. 26, 1947	1610	52	641
Jan. 27, 1947	0745	47	692
Mar. 14, 1947	0845	51	541
Apr. 7, 1947	1000	66	583
June 23, 1947	0645	71	585
Aug. 4, 1947	1300	72	412
Sept. 9, 1947	0930	75	356
Dec. 4, 1947	1740	54	322
Mar. 2, 1948	0830	54	838
June 26, 1948	1435	66	806
Aug. 11, 1948	0850	66	454
June 11, 1949	0720	63	816
Aug. 26, 1949	1230	67	593
Oct. 3, 1949	1445	59	509
Nov. 11, 1949	1600	58	611
Oct. 18, 1950	0855	62	527
Nov. 13, 1950	1720	46	521
Jan. 11, 1951	0955	41	530
May 12, 1951	1300	64	1,040
July 19, 1952	1200	68	680
Aug. 30, 1952	1300	71	516
Jan. 17, 1953	1250	40	370
Feb. 28, 1953	0835	52	461
July 18, 1953	1115	68	462
Aug. 17, 1953	0830	68	326
Sept. 26, 1953	0630	63	302
Dec. 19, 1953	1130	37	237
Jan. 30, 1954	1835	44	248
May 3, 1954	1400	61	2,740
May 18, 1954	0950	64	507
Sept. 15, 1954	1005	68	191
Feb. 16, 1961	1450	57	316
Apr. 27, 1961	0920	61	931
June 21, 1961	1610	67	882
Aug. 29, 1961	1300	77	430
Nov. 2, 1961	1335	65	312
July 31, 1962	0915	69	390
Oct. 9, 1962	0920	61	382
Dec. 12, 1962	1035	40	254
Feb. 19, 1963	1445	51	221
Mar. 26, 1963	1850	58	540
May 1, 1963	1010	59	270
July 10, 1963	1130	70	618
Aug. 15, 1963	0740	69	375
Sept. 17, 1963	1010	65	293
Oct. 23, 1963	1100	60	245
Nov. 26, 1963	0845	51	348
Jan. 7, 1964	1015	43	210
Feb. 5, 1964	1115	49	190
Apr. 22, 1964	1415	67	790
May 20, 1964	0900	70	583
June 24, 1964	1810	72	545
Aug. 4, 1964	1745	75	360
Sept. 10, 1964	1245	71	307
Oct. 9, 1964	0800	56	267
Nov. 4, 1964	0800	56	225
Dec. 16, 1964	1020	46	244
Feb. 24, 1965	1415	49	370
Mar. 24, 1965	1250	48	380
May 4, 1965	0815	64	631
June 2, 1965	1425	70	548
July 7, 1965	1430	74	378
Aug. 3, 1965	1240	67	315
Sept. 1, 1965	1420	74	285
Oct. 6, 1965	1155	58	334
Nov. 10, 1965	1615	59	257
Dec. 15, 1965	1430	50	362
Jan. 19, 1966	1500	47	658
Feb. 11, 1966	1155	51	3,860
Feb. 16, 1966	1645	51	1,440
Mar. 23, 1966	1030	58	665
May 4, 1966	1030	60	1,630
June 16, 1966	0805	65	696
Aug. 25, 1966	0915	68	412
Sept. 28, 1966	0830	66	377
Nov. 3, 1966	1120	50	289
Dec. 8, 1966	0800	58	380
Jan. 11, 1967	1455	47	315
Feb. 14, 1967	1715	50	453
Mar. 28, 1967	1740	63	379
May 2, 1967	1830	61	424
June 6, 1967	1805	76	409
July 11, 1967	1805	72	295
Aug. 23, 1967	1455	70	209
Oct. 3, 1967	1550	68	195
Dec. 13, 1967	1240	52	654
Feb. 7, 1968	1400	49	1,200
Mar. 19, 1968	1220	57	753
May 22, 1968	1440	57	1,070
July 9, 1968	1225	68	503
Aug. 23, 1968	0915	76	419
Oct. 2, 1968	1530	65	449
Oct. 16, 1968	1525	64	367
Dec. 4, 1968	1035	48	1,320
Jan. 15, 1969	1240	48	999
Mar. 19, 1969	0945	52	903
June 3, 1969	1855	62	816
July 15, 1969	1555	71	598
Sept. 16, 1969	1725	65	416

ARKANSAS RIVER BASIN

7-1855. Stahl Creek near Miller, Mo.

Location.--Lat 37°11'40", long 93°50'40", in SE¼ sec.26, T.29 N., R.27 W., on downstream side of left abutment of bridge on State Highway 39, 1½ miles south of Miller and 6.4 miles upstream from mouth.

Drainage area.--3.86 sq mi.

Discharge records available.--June 1950 to September 1959 (discontinued). Discharge measurements and gage-height record available October 1959 to September 1969.

Maximum temperature measured.--79° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
June 22, 1950	1430	76	0.21				
Aug. 3, 1950	0825	70	.16				
Aug. 28, 1950	0900	67	29.7				
Sept. 15, 1950	1445	46	38.1				
Oct. 15, 1950	0915	63	1.59				
Nov. 11, 1950	1000	34	.24				
Dec. 27, 1950	1215	34	.07				
Feb. 10, 1951	1535	38	1.44				
Apr. 4, 1951	1510	61	1.04				
June 9, 1951	0855	68	.24				
Aug. 3, 1951	0830	77	.36				
Sept. 15, 1951	1135	66	.11				
Dec. 21, 1951	1455	35	1.26				
Mar. 27, 1953	1500	60	1.37				
May 1, 1953	1515	68	1.64				
June 5, 1953	1400	70	.18				
May 5, 1954	0820	55	.97				
June 16, 1954	0855	74	.01				
Dec. 15, 1954	0650	40	.44				
Oct. 9, 1961	1230	67	.12				
Dec. 4, 1961	1505	55	8.07				
Jan. 11, 1962	1130	33	.70				
Apr. 17, 1962	0935	55	1.56				
July 9, 1962	1640	79	.85				
Aug. 14, 1962	1050	75	.02				
Apr. 2, 1963	1240	63	.22				
May 7, 1963	1500	74	.08				
June 11, 1963	0915	70	.88				
Apr. 21, 1964	1110	63	4.26				
May 25, 1964	1230	77	.20				
July 7, 1964	1800	73	.39				
Dec. 15, 1964	1420	40	.21				
Jan. 22, 1965	0830	41	.96				
Feb. 18, 1965	1600	47	.58				
May 25, 1965	1300	74	.42				
July 6, 1965	1610	70	3.48				
Sept. 8, 1965	0935	75	.04				
Nov. 24, 1965	1425	50	.12				
Feb. 7, 1966	1430	44	1.15				
Mar. 23, 1966	1340	53	2.02				
May 4, 1966	1540	71	1.97				
June 17, 1966	1355	74	.14				
Oct. 25, 1966	0955	51	.10				
Mar. 13, 1967	1635	55	1.10				
Apr. 10, 1967	1600	62	.86				
May 16, 1967	1620	60	4.05				
June 12, 1967	1525	74	1.73				
July 10, 1967	1550	78	2.49				
Aug. 8, 1967	1510	78	.22				
Sept. 12, 1967	1450	69	.04				
Oct. 10, 1967	0920	52	1.78				
Dec. 12, 1967	1425	48	5.19				
Feb. 9, 1968	1005	39	3.96				
May 2, 1968	1135	63	.90				
Aug. 13, 1968	1710	72	.94				
Sept. 24, 1968	1105	69	.13				
Nov. 6, 1968	1130	53	4.59				
Jan. 6, 1969	1330	43	2.72				
Feb. 12, 1969	0910	37	2.63				
Mar. 11, 1969	1150	35	1.43				
Apr. 24, 1969	1445	64	1.29				
June 16, 1969	1410	68	.23				
Sept. 16, 1969	1520	70	.10				

ARKANSAS RIVER BASIN

7-1856.5 Spring River near Stotts City, Mo.

Location.--On line between secs 13 and 14, T.28 N., R.28 W., at bridge on State Highway 97, 2 miles north of Stotts City, Lawrence County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
June 28, 1946	1015	76	147				
Feb. 2, 1947	0820	40	117				
Oct. 10, 1948	1030	59	56.0				
Oct. 7, 1953	1500	60	30.0				
Sept. 2, 1954	1440	77	10.5				
Oct. 9, 1961	1330	67	67.2				
May 23, 1962	1510	70	79.2				
Aug. 21, 1962	1245	77	39.0				
Sept. 3, 1963	1450	70	48.1				
Oct. 2, 1963	1300	62	30.7				
Nov. 4, 1963	1500	55	27.6				
Oct. 21, 1964	1030	53	30.8				
June 1, 1965	0830	72	187				
Sept. 5, 1967	1410	67	62.9				

ARKANSAS RIVER BASIN

7-1857. Spring River at Larussel, Mo.

__Location__.—Lat 37°09'15", long 94°03'20", SW¼SW¼ sec.12, T.28 N., R.29 W., on right bank on upstream side of Bower Mills Bridge, three-quarters of a mile north of Larussel, and 2½ miles upstream from Cave Spring Branch.

__Drainage area__.—306 sq mi.

__Discharge records available.__—April 1957 to September 1969.

__Maximum temperature measured__.—93° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 7, 1953	1335	65	33.9				
Jan. 30, 1961	0715	36	43.8				
July 19, 1961	1340	77	185				
Oct. 9, 1961	1435	67	81.6				
Dec. 4, 1961	1600	55	78.9				
Apr. 17, 1962	0830	56	206				
Aug. 14, 1962	1230	76	53.6				
Feb. 27, 1963	0930	40	38.4				
Apr. 2, 1963	1355	65	75.4				
May 7, 1963	1655	75	42.1				
June 11, 1963	1010	73	125				
Oct. 30, 1963	1155	56	29.8				
Dec. 2, 1963	1305	43	27.6				
Jan. 7, 1964	1305	37	20.3				
Feb. 10, 1964	1420	43	25.3				
Mar. 17, 1964	1435	56	52.6				
Apr. 21, 1964	1135	66	182				
May 25, 1964	1305	74	82.3				
July 7, 1964	1620	79	134				
Aug. 12, 1964	1000	72	52.9				
Oct. 7, 1964	0800	54	34.1				
Dec. 15, 1964	1700	41	58.5				
Jan. 22, 1965	1030	48	78.5				
Mar. 31, 1965	1510	58	151				
Apr. 6, 1965	0900	47	5,990				
Apr. 13, 1965	1345	61	613				
May 25, 1965	1415	71	249				
July 7, 1965	1450	74	255				
Aug. 10, 1965	1000	70	80.2				
Sept. 9, 1965	0945	72	125				
Nov. 24, 1965	1239	50	77.1				
Mar. 21, 1966	1100	60	289				
May 4, 1966	1705	66	278				
June 15, 1966	1220	84	141				
July 14, 1966	1315	86	67.5				
July 25, 1966	1325	73	76.4				
Aug. 23, 1966	1230	67	225				
Dec. 17, 1966	1250	39	52.7				
Feb. 13, 1967	1500	48	126				
Mar. 13, 1967	1700	64	92.8				
May 16, 1967	1830	59	406				
June 12, 1967	1625	72	184				
July 11, 1967	0850	69	334				
Aug. 8, 1967	1730	73	130				
Sept. 12, 1967	1650	68	66.6				
Oct. 10, 1967	1145	55	137				
Dec. 12, 1967	1710	47	554				
Feb. 8, 1968	1740	50	705				
May 2, 1968	1345	65	279				
Sept. 24, 1968	1245	68	161				
Nov. 12, 1968	1535	46	449				
Jan. 6, 1969	1455	44	445				
Feb. 12, 1969	1040	46	427				
Mar. 11, 1969	1355	45	287				
Apr. 24, 1969	1310	59	297				
June 16, 1969	1215	64	130				
July 31, 1969	1430	93	84.8				
Sept. 16, 1969	1715	68	93.1				

ARKANSAS RIVER BASIN

7-1857.65 Spring River at Carthage, Mo.

Location.--Lat 37°11'11", long 94°18'56", in N½SW¼SE¼ sec.33, T.29 N., R.31 W., on downstream side of second pier from left abutment of Missouri Pacific Railroad bridge in Carthage and 600 ft downstream from U. S. Highway 71 bridge.

Drainage area.--425 sq mi.

Discharge records available.--October 1966 to September 1969. Occasional discharge measurements 1951-54. Intermittant gage readings since Oct. 31, 1945 in files of Tulsa district office Corps of Engineers.

Maximum temperature measured.--84° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Nov. 11, 1950	0745	43	163				
Feb. 10, 1951	1440	40	211				
June 9, 1951	1050	68	236				
Aug. 3, 1951	0920	76	334				
Sept. 15, 1951	0915	66	218				
Oct. 22, 1951	1255	60	137				
Dec. 21, 1951	1220	35	327				
Aug. 7, 1952	1410	78	147				
Sept. 25, 1952	0850	68	82.3				
Nov. 7, 1952	1505	53	66.3				
Mar. 27, 1953	1235	55	257				
May 1, 1953	1435	66	333				
June 5, 1953	1050	69	151				
Oct. 7, 1953	1035	62	71.3				
Nov. 18, 1953	0925	53	64.2				
Jan. 6, 1954	1010	35	83.5				
Sept. 2, 1954	1255	84	8.30				
Feb. 14, 1967	1345	48	146				
Mar. 14, 1967	0900	58	718				
Apr. 11, 1967	1050	66	124				
June 13, 1967	0810	71	257				
July 11, 1967	1105	75	494				
Aug. 10, 1967	1045	69	167				
Sept. 14, 1967	0845	68	74.4				
Oct. 10, 1967	1445	57	174				
Feb. 8, 1968	1430	44	941				
May 2, 1968	1645	68	330				
July 17, 1968	1350	77	203				
Jan. 6, 1969	1640	45	605				
Feb. 12, 1969	1350	48	514				
Mar. 12, 1969	1705	45	332				
May 13, 1969	1610	65	259				
June 12, 1969	1710	72	160				
Sept. 17, 1969	1000	67	116				

ARKANSAS RIVER BASIN

7-1860. Spring River near Waco, Mo.

Location.--Lat 37°14'45", long 94°33'55", on line between SE¼ sec.7, and NE¼ sec.18, T.29 N., R.33 W., on left bank on downstream side of left pier of county highway bridge, three-quarters of a mile downstream from Blackberry Creek, 1½ miles east of Waco, and 47.6 miles upstream from mouth.

Drainage area.--1,164 sq mi.

Discharge records available.--April 1924 to September 1969.

Maximum temperature measured.--88° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 4, 1933	1732	75	1,900
Sept. 8, 1945	1200	74	253
Oct. 19, 1945	1230	62	414
June 28, 1946	1335	80	249
Aug. 9, 1946	1530	88	119
Nov. 22, 1946	1450	47	281
Feb. 1, 1947	1220	40	254
Aug. 1, 1947	0740	85	172
Oct. 29, 1947	1100	58	110
Dec. 5, 1947	1345	46	69.8
Jan. 16, 1948	1200	32	89.0
Apr. 13, 1948	1300	55	285
May 26, 1948	0725	68	253
Aug. 19, 1948	0750	78	325
Oct. 9, 1948	1815	58	80.8
Nov. 21, 1948	1130	50	130
Jan. 5, 1949	0955	36	207
June 22, 1949	1100	82	434
July 27, 1949	1200	84	147
Aug. 30, 1949	1540	73	80.8
Oct. 13, 1949	1035	62	208
Dec. 1, 1949	0905	45	141
Apr. 6, 1950	0805	47	478
June 23, 1950	0745	76	277
Oct. 15, 1950	1725	64	380
Nov. 10, 1950	1600	46	186
Dec. 27, 1950	1720	34	113
Aug. 3, 1951	1300	81	383
Dec. 21, 1951	1025	35	553
Aug. 7, 1952	1145	78	179
Sept. 25, 1952	0710	63	80.3
Nov. 7, 1952	1225	51	56.5
Mar. 27, 1953	1000	53	313
July 8, 1953	1000	78	91.9
Oct. 7, 1953	0820	64	26.6
Nov. 18, 1953	0800	54	28.6
Jan. 6, 1954	0835	35	25.7
Feb. 17, 1954	0825	51	21.3
May 4, 1954	1520	60	699
June 16, 1954	0705	76	64.3
July 28, 1954	0615	81	5.05
Aug. 24, 1954	1410	87	5.81
Dec. 14, 1954	1510	40	119
Jan. 30, 1961	1600	35	47.7
Dec. 5, 1961	1010	47	257
Jan. 10, 1962	1530	33	237
Apr. 17, 1962	1350	56	489
July 10, 1962	1415	79	198
Aug. 15, 1962	0935	80	79.6
Dec. 16, 1962	0950	40	104
Apr. 3, 1963	0725	62	166
June 11, 1963	1350	83	128
Oct. 30, 1963	1600	61	35.0
Dec. 2, 1963	1530	43	30.4
Jan. 7, 1964	1545	36	39.1
Feb. 10, 1964	1635	44	33.2
Mar. 17, 1964	1705	57	68.0
Apr. 21, 1964	1525	72	298
May 25, 1964	1550	80	194
July 7, 1964	0955	79	200
Aug. 12, 1964	1815	76	58.6
Sept. 17, 1964	1000	69	55.2
Oct. 7, 1964	1130	58	52.1
Nov. 10, 1964	1510	63	52.6
Dec. 16, 1964	1040	42	92.8
Jan. 21, 1965	1315	40	120
Feb. 17, 1965	1315	43	153
May 31, 1965	1045	51	247
Apr. 6, 1965	1650	62	15,800
May 26, 1965	1245	71	394
July 8, 1965	1120	79	362
Aug. 10, 1965	1450	82	103
Oct, 13, 1965	1123	60	179
Nov. 1, 1965	1730	59	114
Nov. 23, 1965	1553	49	133
Dec. 6, 1965	—	46	98.0
Jan. 6, 1966	1030	41	376
Feb. 4, 1966	1255	34	160
Feb. 12, 1966	1525	48	2,430
Mar. 12, 1966	1625	52	486
Mar. 21, 1966	1530	63	461
Apr. 16, 1966	1430	65	333
June 1, 1966	1000	71	274
June 15, 1966	1615	76	265
June 26, 1966	1900	87	140
July 12, 1966	1240	84	84.2
July 25, 1966	1725	83	164
Aug. 24, 1966	1830	71	528
Sept. 27, 1966	1530	67	90.0
Oct. 27, 1966	1130	58	59.0
Nov. 16, 1966	1400	52	87.0
Nov. 17, 1966	0830	54	85.0
Dec. 14, 1966	0930	39	64.0
Jan. 11, 1967	1505	36	124
Feb. 14, 1967	1530	52	218
Mar. 15, 1967	1150	48	134
Apr. 12, 1967	1300	63	144
May 17, 1967	1600	60	1,000
June 14, 1967	0900	74	487
July 11, 1967	1540	77	890
Aug. 10, 1967	0900	73	206
Sept. 13, 1967	1450	72	90.0
Oct. 11, 1967	0900	56	250
Nov. 14, 1967	1300	52	554
Dec. 19, 1967	1530	47	1,190
Jan. 17, 1968	1450	40	366
Feb. 7, 1968	1600	46	1,540
Feb. 14, 1968	0810	39	860
Mar. 19, 1968	0950	52	3,730
Apr. 16, 1968	1100	61	1,290
May 3, 1968	1130	67	507
May 15, 1968	1445	71	473
June 26, 1968	0900	67	242
July 19, 1968	0915	78	230
Aug. 14, 1968	1400	74	445
Sept. 24, 1968	1530	69	197
Oct. 23, 1968	0845	54	206
Nov. 14, 1968	0915	50	969
Dec. 4, 1968	1740	46	1,400
Jan. 8, 1969	1200	44	998
Feb. 5, 1969	1600	44	1,390
Mar. 12, 1969	1145	41	544
Apr. 23, 1969	1630	63	690
May 14, 1969	0955	64	365
June 10, 1969	1445	69	276
July 30, 1969	1640	82	92.8
Aug. 14, 1969	1140	77	71.0
Sept. 17, 1969	1330	68	4,280

ARKANSAS RIVER BASIN

7-1861. Center Creek near Sarcoxie, Mo.

Location.--On line between secs. 1 and 2, T.27 N., R.30 W., at bridge on State Highway 37, 3/4 mile north of U. S. Highway 166 (I-44), and 2 miles northwest of Sarcoxie, Jasper County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 7, 1953	0915	56	10.1				
Oct. 9, 1961	1630	67	30.9				
May 22, 1962	1625	77	29.3				
Aug. 21, 1962	1340	85	16.3				
Sept. 3, 1963	1700	75	16.5				
Oct. 2, 1963	1430	66	9.51				
Nov. 4, 1963	1650	54	11.8				
Oct. 21, 1964	0935	57	9.04				
Feb. 16, 1965	1500	39	23.2				
Sept. 5, 1967	1520	67	22.8				

ARKANSAS RIVER BASIN

7-1862. Center Creek near Fidelity, Mo.

Location.--NW¼ sec.34, T.28 N., R.31 W., at bridge on U. S. Highway Alt. 71, 1½ miles north of Fidelity, Jasper County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 10, 1961	0830	67	51.6				
May 23, 1962	0915	74	54.3				
Aug. 21, 1962	1450	81	31.4				
Nov. 28, 1962	1300	51	51.8				
Sept. 3, 1963	1805	75	23.2				
Oct. 2, 1963	1525	63	11.6				
Nov. 5, 1963	0935	53	14.5				
Oct. 21, 1964	0845	52	3.01				
Sept. 6, 1967	0805	64	9.90				
Oct. 23, 1968	1720	56	39.5				

ARKANSAS RIVER BASIN

7-1862.5 Grove Creek near Scotland, Mo.

Location.--S½ sec.25, T.28 N., R.32 W., at low water ford on county highway, 1 mile north of Atlas Powder Plant and 2 miles north of Scotland, Jasper County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--85° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 7, 1953	0700	56	4.00				
Oct. 10, 1961	1000	67	9.82				
May 23, 1962	1005	69	9.98				
Aug. 21, 1962	1520	85	7.47				
Nov. 28, 1962	1225	55	10.2				
Sept. 4, 1963	0730	73	5.26				
Oct. 2, 1963	1630	71	4.38				
Nov. 5, 1963	1100	59	4.94				
Oct. 21, 1964	0745	53	4.48				
Feb. 16, 1965	1605	37	6.34				
Aug. 4, 1966	0815	68	4.17				

ARKANSAS RIVER BASIN.

7-1864. Center Creek near Carterville, Mo.

Location.--Lat 37°08'26", long 94°22'57", in NW¼NW¼NW¼ sec.24, T.28 N., R.32 W., at downstream side of right pier of bridge on County Road HH, 1½ miles downstream from Grove Creek, 3 miles east of Carterville, and 17 miles above mouth.

Drainage area.--232 sq mi.

Discharge records available.--June 1962 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Remarks.--Continuous temperature record from November 1968 to September 1969 to be published in Water Resources Data for Missouri, Part 2. Water Quality Records, 1969.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 10, 1961	1100	67	62.3
May 23, 1962	1045	74	66.8
July 10, 1962	1030	73	125
Aug. 14, 1962	1430	82	41.3
Aug. 25, 1962	----	76	36.0
Sept. 10, 1962	1645	70	82.0
Oct. 11, 1962	0920	69	183
Nov. 8, 1962	1200	50	82.0
Dec. 7, 1962	0800	41	59.0
Dec. 16, 1962	0855	38	53.4
Jan. 11, 1963	0920	43	112
Feb. 6, 1963	1530	46	56.0
Mar. 14, 1963	0920	47	140
Apr. 2, 1963	1615	65	72.4
Apr. 12, 1963	1120	59	62.0
May 8, 1963	0755	70	42.1
May 10, 1963	1500	79	39.0
June 7, 1963	0800	77	47.0
June 11, 1963	1200	80	52.6
Aug. 28, 1963	1245	85	26.0
Sept. 17, 1963	1350	79	25.0
Oct. 8, 1963	1635	72	23.0
Oct. 29, 1963	1730	56	23.0
Oct. 30, 1963	1435	61	20.4
Dec. 2, 1963	1505	44	20.0
Dec. 18, 1963	1000	32	23.0
Jan. 7, 1964	1435	39	17.5
Jan. 20, 1964	1630	45	18.0
Feb. 9, 1964	1500	45	22.0
Feb. 10, 1964	1535	43	20.8
Mar. 9, 1964	1515	42	53.0
Mar. 17, 1964	1515	58	35.1
Mar. 20, 1964	1425	49	33.0
Apr. 20, 1964	1630	72	96.0
Apr. 21, 1964	1435	71	102
May 19, 1964	1600	77	56.0
May 25, 1964	1455	78	55.3
June 8, 1964	1700	79	90.0
July 7, 1964	1530	78	65.2
July 9, 1964	1500	78	58.0
Aug. 6, 1964	0645	80	26.8
Aug. 10, 1964	1700	82	22.0
Sept. 1, 1964	----	79	43.0
Sept. 11, 1964	0715	74	43.0
Oct. 6, 1964	1230	58	----
Oct. 7, 1964	0955	55	17.4
Nov. 3, 1964	1715	65	23.0
Nov. 10, 1964	1340	63	23.5
Dec. 1, 1964	----	36	45.0
Dec. 3, 1964	1045	41	45.0
Dec. 21, 1964	1315	44	28.8
Dec. 28, 1964	1610	42	26.0
Jan. 21, 1965	1740	43	37.4
Jan. 25, 1965	1630	49	41.0
Feb. 16, 1965	1630	36	43.1
Feb. 17, 1965	1345	41	42.0
Mar. 16, 1965	1030	50	120
Apr. 6, 1965	1010	58	3,030
Apr. 13, 1965	1000	62	406
May 12, 1965	0800	66	164
May 26, 1965	1410	65	163
June 15, 1965	0900	69	270
June 22, 1965	1600	77	110
July 7, 1965	1650	78	96.3
July 13, 1965	0940	86	86.0
Aug. 10, 1965	1330	72	36.0
Sept. 8, 1965	2130	79	45.0
Sept. 9, 1965	1215	80	43.7
Oct. 5, 1965	1130	60	88.0
Oct. 12, 1965	1650	58	63.2
Nov. 3, 1965	0955	56	42.0
Nov. 24, 1965	0955	49	35.1
Dec. 7, 1965	----	45	33.0
Jan. 11, 1966	1300	47	80.0
Feb. 4, 1966	0940	34	41.8
Feb. 13, 1966	1300	46	302
Feb. 16, 1966	1710	45	228
Mar. 12, 1966	1730	53	153
Mar. 21, 1966	1315	65	151
Apr. 16, 1966	1625	68	74.0
May 5, 1966	0855	64	152
June 1, 1966	1300	69	109
June 15, 1966	1420	77	78.2
June 26, 1966	1230	79	58.0
July 12, 1966	0800	74	33.4
July 27, 1966	1545	84	40.0
Aug. 4, 1966	0905	73	605
Aug. 25, 1966	1800	73	56.0
Aug. 29, 1966	1815	73	55.2
Sept. 28, 1966	1680	66	41.0
Oct. 26, 1966	1620	56	28.8
Nov. 16, 1966	0850	48	38.0
Nov. 17, 1966	1030	54	35.8
Dec. 13, 1966	1235	35	28.0
Jan. 11, 1967	1620	37	42.0
Feb. 15, 1967	1400	49	58.0
Mar. 14, 1967	1320	55	45.0
Apr. 11, 1967	1415	65	62.0
May 17, 1967	1210	60	250
June 13, 1967	1200	74	111
July 12, 1967	1100	69	254
Aug. 9, 1967	1000	75	80.0
Sept. 13, 1967	0910	69	38.0
Oct. 11, 1967	1645	54	63.0
Oct. 12, 1967	1100	52	60.9
Nov. 15, 1967	0900	50	181
Dec. 19, 1967	1400	45	307
Jan. 17, 1968	0915	39	104
Feb. 8, 1968	1015	44	531
Feb. 13, 1968	1645	44	320
Mar. 20, 1968	0815	49	2,300
Apr. 16, 1968	1530	63	168
May 3, 1968	1400	67	182
May 15, 1968	1145	70	126
June 26, 1968	1500	65	650
July 18, 1968	1300	74	121
Aug. 15, 1968	1835	76	88.0
Sept. 25, 1968	1540	68	69.0
Nov. 13, 1968	1700	50	241
Dec. 5, 1968	0830	49	352
Jan. 7, 1969	1700	46	277
Feb. 4, 1969	1215	48	359
Mar. 4, 1969	0820	46	183
Mar. 11, 1969	1540	45	151
Apr. 21, 1969	1300	60	200
May 14, 1969	1150	64	125
June 9, 1969	1700	69	83.0
July 7, 1969	1630	84	78.0
July 30, 1969	1825	79	49.6
Aug. 14, 1969	0930	75	38.0
Sept. 3, 1969	1300	74	53.0
Sept. 18, 1969	0930	65	54.5

ARKANSAS RIVER BASIN

7-1864.6 Center Creek near Carl Junction, Mo.

Location.--NE¼ sec.9, T.28 N., R.33 W., at bridge on State Highway 171, 2 miles southeast of Carl Junction, Jasper County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 19, 1945	1445	62	227				
Oct. 10, 1948	0750	57	51.5				
July 27, 1949	1450	82	101				
Oct. 7, 1953	0745	60	22.1				
May 23, 1962	1220	70	80.7				
Aug. 22, 1962	0750	80	43.7				
Nov. 28, 1962	0920	48	105				
Sept. 4, 1963	1115	76	32.2				
Oct. 3, 1963	0915	64	21.5				
Nov. 5, 1963	0840	53	23.4				
Oct. 20, 1964	1240	54	20.2				
Feb. 17, 1965	1115	43	57.6				
Aug. 4, 1966	1425	78	34.1				
Sept. 5, 1967	1710	68	46.8				
Oct. 21, 1968	1620	62	91.5				

ARKANSAS RIVER BASIN

7-1866. Turkey Creek near Joplin, Mo.

Location.--Lat 37°07'15", long 94°34'55", in NE¼SE¼ sec.25, T.28 N., R.34 W., at downstream side of right pier of bridge on Jasper County Highway P, 2½ miles upstream from mouth, and 3 miles northwest of Joplin.

Drainage area.--41.8 sq mi.

Discharge records available.--October 1963 to September 1969.

Maximum temperature measured.--86° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 28, 1963	1000	82	---
Sept. 17, 1963	1530	78	---
Oct. 9, 1963	0830	66	6.20
Oct. 29, 1963	1620	61	6.20
Dec. 2, 1963	1650	47	9.20
Dec. 18, 1963	1200	35	8.40
Jan. 7, 1964	1640	42	8.03
Jan. 20, 1964	1720	46	5.60
Feb. 9, 1964	1535	48	8.40
Feb. 10, 1964	1725	46	9.80
Mar. 9, 1964	1705	41	57.0
Mar. 17, 1964	1750	57	12.5
Mar. 30, 1964	1640	48	16.0
Apr. 20, 1964	1610	69	16.0
Apr. 21, 1964	1615	70	22.7
May 19, 1964	1910	75	15.0
May 25, 1964	1635	78	13.8
June 9, 1964	0730	71	18.0
July 7, 1964	1305	79	16.7
July 9, 1964	1600	79	21.0
Aug. 10, 1964	1830	79	21.0
Aug. 12, 1964	1700	76	17.1
Sept. 11, 1964	0630	73	20.0
Sept. 17, 1964	0750	68	17.2
Sept. 22, 1964	0820	73	22.0
Oct. 6, 1964	1430	61	13.0
Oct. 7, 1964	1235	62	5.93
Nov. 3, 1964	1825	65	14.0
Nov. 11, 1964	0840	62	9.60
Dec. 2, 1964	0930	48	15.0
Dec. 16, 1964	0830	45	13.1
Dec. 28, 1964	1645	46	14.0
Jan. 21, 1965	0930	44	15.6
Jan. 25, 1965	1730	51	22.0
Feb. 17, 1965	0945	45	12.0
Mar. 15, 1965	1645	55	30.0
Mar. 31, 1965	0920	49	15.8
Apr. 5, 1965	1915	59	665
Apr. 12, 1965	1615	64	66.0
Apr. 14, 1965	1015	59	66.1
May 11, 1965	1700	72	23.0
May 26, 1965	0815	76	12.5
June 14, 1965	1845	73	132
July 8, 1965	0830	76	11.4
July 13, 1965	0805	77	9.60
Aug. 10, 1965	1700	78	9.10
Sept. 8, 1965	2000	79	13.0
Sept. 9, 1965	1735	79	16.6
Oct. 5, 1965	1400	65	22.0
Oct. 13, 1965	0900	60	12.0
Nov. 2, 1965	1830	61	14.0
Nov. 23, 1965	1700	52	12.3
Dec. 7, 1965	—	47	6.80
Jan. 10, 1966	0900	47	10.0
Feb. 4, 1966	1555	36	12.6
Feb. 12, 1966	1200	50	39.0
Feb. 17, 1966	1015	42	24.2
Mar. 12, 1966	1500	53	45.0
Mar. 21, 1966	1200	63	24.5
Apr. 16, 1966	1300	66	5.20
May 5, 1966	1245	67	32.5
May 31, 1966	1600	73	32.0
June 16, 1966	0655	71	16.2
June 27, 1966	0900	78	14.0
July 12, 1966	1500	86	13.3
July 26, 1966	0730	76	9.50
Aug. 25, 1966	1030	71	9.50
Sept. 27, 1966	1815	67	26.0
Oct. 27, 1966	1450	63	15.0
Nov. 16, 1966	1550	58	16.4
Dec. 13, 1966	1540	46	16.0
Jan. 11, 1967	0920	41	17.0
Feb. 15, 1967	0930	53	21.9
Mar. 15, 1967	0920	46	13.4
Apr. 12, 1967	0950	59	117
May 18, 1967	0815	61	49.9
June 13, 1967	1615	77	39.7
July 11, 1967	1405	72	52.9
Aug. 10, 1967	1010	71	12.0
Sept. 13, 1967	1130	72	7.80
Oct. 11, 1967	1100	56	15.3
Nov. 14, 1967	1500	55	27.0
Dec. 19, 1967	1545	49	45.2
Dec. 20, 1967	0910	50	40.0
Jan. 17, 1968	1315	45	30.0
Feb. 7, 1968	1700	46	78.8
Feb. 14, 1968	0940	42	56.0
Mar. 19, 1968	1300	53	955
Mar. 27, 1968	1150	55	70.4
Apr. 16, 1968	1245	61	41.0
May 15, 1968	1630	71	27.0
May 21, 1968	1330	61	21.3
June 26, 1968	1130	65	128
July 19, 1968	1040	76	31.0
Aug. 14, 1968	1545	77	46.7
Sept. 24, 1968	1650	68	23.0
Nov. 14, 1968	1200	57	34.0
Dec. 5, 1968	1500	50	53.3
Jan. 8, 1969	1315	49	44.8
Feb. 4, 1969	1600	49	61.4
Mar. 12, 1969	1305	46	32.1
Apr. 24, 1969	1020	56	52.3
June 10, 1969	1225	67	25.9
July 7, 1969	1445	82	31.0
July 30, 1969	1535	78	18.0
Aug. 14, 1969	1520	76	67.0
Sept. 3, 1969	1100	72	103
Sept. 17, 1969	1515	60	48.2

ARKANSAS RIVER BASIN

7-1867. Shoal Creek near Fairview, Mo.

Location.--On line between secs. 3 and 10, T.24 N., R.29 W., at bridge on State Highway 97, 1/4 mile east of junction with County Highway T and 1½ miles east of Fairview, Barry County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--75° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 6, 1953	1345	60	12.4				
Sept. 2, 1954	0720	70	5.75				
May 22, 1962	1515	75	37.8				
Aug. 21, 1962	1000	73	19.5				
Nov. 29, 1962	0920	48	23.9				
Sept. 5, 1963	1435	75	12.5				
Oct. 4, 1963	0705	61	10.0				
Nov. 6, 1963	1710	57	10.8				
Oct. 20, 1964	1025	50	10.8				
Aug. 3, 1966	1145	72	24.8				
Sept. 5, 1967	1135	64	15.6				

ARKANSAS RIVER BASIN.

7-1868. Capps Creek near Berwick, Mo.

Location.--NE¼ sec.15, T.25 N., R.29 W., at bridge on county highway, 3 miles south of Berwick and 5 miles north of Fairview, Newton County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
May 22, 1962	1425	77	27.1				
Aug. 21, 1962	0915	64	19.3				
Nov. 29, 1962	0830	52	36.1				
Sept. 5, 1963	1340	67	17.1				
Oct. 3, 1963	1710	66	14.5				
Nov. 6, 1963	1345	56	12.9				
Oct. 20, 1964	1115	52	14.9				
Aug. 3, 1966	1325	69	28.1				
Sept. 5, 1967	1035	66	19.0				
Oct. 23, 1968	1420	58	47.1				

ARKANSAS RIVER BASIN

7-1868.8 Shoal Creek at Ritchey, Mo.

Location.--SW¼ sec.26, T.26 N., R.30 W., at bridge on County Highway O at Ritchey, Newton County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Oct. 6, 1953	1620	61	33.4				
May 22, 1962	1200	75	100				
Aug. 21, 1962	0745	75	55.9				
Nov. 28, 1962	1515	52	101				
Sept. 4, 1963	1640	76	43.6				
Oct. 3, 1963	1520	65	31.8				
Nov. 5, 1963	1520	56	34.7				
Oct. 20, 1964	1210	53	38.8				
Feb. 18, 1965	1115	42	99.1				
Aug. 3, 1966	1520	77	75.6				
Sept. 6, 1967	0935	65	67.2				
Oct. 23, 1968	1155	56	108				

ARKANSAS RIVER BASIN

7-1868.9 Shoal Creek at Neosho, Mo.

Location.--SW¼ sec.7, T.25 N., R.31 W., at bridge on county highway at city water works ¼ mile north of U. S. Highway 60 (Bus. Rt.) and ½ mile northeast of Neosho, Newton County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 8, 1945	1740	74	195				
Sept. 15, 1946	0915	68	82.1				
Oct. 6, 1953	1540	64	42.4				
Sept. 2, 1954	0920	77	12.9				
May 22, 1962	1030	74	139				
Aug. 21, 1962	0700	76	36.1				
Nov. 29, 1962	1110	48	122				
Sept. 5, 1963	0735	75	46.8				
Oct. 3, 1963	1355	66	34.2				
Nov. 5, 1963	1705	56	39.7				
Oct. 20, 1964	1430	54	39.3				
Sept. 6, 1967	1315	67	89.0				

ARKANSAS RIVER BASIN

7-1869. Hickory Creek at Neosho, Mo.

Location.--SW¼ sec.18, T.25 N., R.31 W., at bridge on U. S. Highway 60 (Bus. Rt.) near north city limits of Neosho, Newton County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--76° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 2, 1952	0900	72	3.69				
May 22, 1962	1000	74	19.3				
Aug. 21, 1962	0605	71	12.0				
Nov. 29, 1962	1040	51	22.6				
Sept. 4, 1963	1815	75	6.71				
Oct. 3, 1963	1310	76	6.69				
Nov. 6, 1963	0725	53	4.41				
Oct. 20, 1964	1510	63	7.65				
Sept. 6, 1967	1155	66	11.1				
Oct. 23, 1968	1025	56	17.1				

ARKANSAS RIVER BASIN

7-1870. Shoal Creek above Joplin, Mo.

Location.--Lat 37°01'25", long 94°31'00", in SE¼NE¼NE¼ sec.34, T.27 N., R.33 W., on right bank 250 ft upstream from mouth of Spring Creek, 1,400 ft downstream from bridge on State Highway 86, ½ mile south of city limits of Joplin and 13.2 miles above mouth.

Drainage area.--427 sq mi. At site used prior to July 21, 1966, 410 sq mi.

Discharge records available.--October 1941 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 8, 1945	1620	75	237	Jan. 11, 1963	0950	43	253
Oct. 20, 1945	0850	58	375	Feb. 6, 1963	1600	46	146
May 19, 1946	1040	68	393	Mar. 14, 1963	1045	49	314
June 28, 1946	1825	79	271	Apr. 3, 1963	0935	66	190
Sept. 14, 1946	1630	75	107	Apr. 12, 1963	1155	59	160
Oct. 18, 1946	1735	61	84.3	May 8, 1963	1325	75	114
Nov. 23, 1946	0810	47	269	May 10, 1963	1530	79	111
Dec. 19, 1946	1105	41	456	June 7, 1963	0845	77	98.0
Feb. 1, 1947	0750	38	186	Aug. 28, 1963	0800	81	58.0
Mar. 18, 1947	0825	53	369	Oct. 31, 1963	0900	59	46.8
May 23, 1947	0940	66	743	Dec. 3, 1963	0840	39	55.7
June 29, 1947	0845	73	590	Feb. 11, 1964	0835	39	66.3
July 31, 1947	1650	86	175	Apr. 21, 1964	1715	72	196
Sept. 8, 1947	1700	78	101	May 25, 1964	1820	81	102
Oct. 28, 1947	1410	60	97.0	July 18, 1964	1015	79	174
Dec. 5, 1947	1115	43	77.6	Aug. 12, 1964	1330	77	73.3
Jan. 16, 1948	0845	32	80.6	Oct. 7, 1964	1435	58	57.2
Mar. 4, 1948	1350	40	322	Nov. 11, 1964	1015	60	69.2
Apr. 14, 1948	0740	53	202	Dec. 16, 1964	1445	43	88.4
July 9, 1948	0900	73	381	Jan. 21, 1965	1615	44	122
Aug. 19, 1948	1200	76	311	Mar. 30, 1965	1500	53	178
Oct. 9, 1948	1435	61	132	Apr. 5, 1965	1605	59	4,420
Nov. 21, 1948	0905	54	117	Apr. 14, 1965	1255	61	787
Jan. 5, 1949	1230	39	128	May 26, 1965	1535	69	385
May 5, 1949	1245	72	362	July 8, 1965	1510	81	212
June 22, 1949	1430	76	502	Sept. 10, 1965	0900	78	113
July 27, 1949	1600	80	204	Oct. 13, 1965	1355	61	129
Aug. 31, 1949	1845	69	133	Nov. 23, 1965	1355	49	93.8
Nov. 30, 1949	1620	47	116	Feb. 17, 1966	1445	46	458
Feb. 16, 1950	1725	46	475	Mar. 22, 1966	0750	60	289
June 23, 1950	1140	73	505	June 16, 1966	0850	76	183
Aug. 3, 1950	1440	72	471	July 12, 1966	1640	87	108
Oct. 16, 1950	0905	63	398	July 26, 1966	1200	83	112
Nov. 10, 1950	1340	44	255	Aug. 25, 1966	1450	73	140
June 9, 1951	1515	71	230	Oct. 25, 1966	1605	56	75.1
Aug. 3, 1951	1415	79	317	Nov. 16, 1966	1000	51	89.9
Sept. 14, 1951	1300	68	309	Dec. 13, 1966	1645	39	67.7
Oct. 23, 1951	0720	56	306	Jan. 19, 1967	1520	34	82.5
Aug. 7, 1952	0910	81	151	Feb. 14, 1967	0930	45	135
Sept. 24, 1952	1705	67	111	Apr. 12, 1967	1420	63	127
Nov. 7, 1952	0910	50	91.6	May 18, 1967	1245	64	371
Mar. 27, 1953	0725	53	296	June 14, 1967	1215	77	189
May 1, 1953	0800	62	390	Aug. 10, 1967	1520	75	164
June 5, 1953	0710	76	181	Sept. 14, 1967	1140	71	90.6
July 8, 1953	0805	79	120	Oct. 11, 1967	1645	55	179
Nov. 17, 1953	1550	52	55.1	Feb. 7, 1968	1230	48	1,410
Jan. 5, 1954	1320	43	51.5	May 21, 1968	1600	61	313
Feb. 16, 1954	1355	55	58.2	Aug. 16, 1968	1050	75	210
May 4, 1954	1350	59	358	Sept. 26, 1968	1025	64	195
June 15, 1954	1505	80	83.4	Nov. 14, 1968	1330	53	405
July 27, 1954	1530	84	54.4	Dec. 6, 1968	0930	46	728
Aug. 24, 1954	1055	81	24.0	Jan. 8, 1969	1545	44	599
Sept. 2, 1954	1100	82	15.0	Feb. 13, 1969	1015	49	602
Oct. 5, 1954	1300	77	150	Mar. 12, 1969	1505	44	370
Jan. 31, 1961	0805	33	97.3	Apr. 22, 1969	1625	64	461
July 18, 1961	1605	81	284	June 11, 1969	1600	75	227
Dec. 5, 1961	1610	52	193	July 31, 1969	1140	77	158
Jan. 10, 1962	1300	33	199	Sept. 17, 1969	1715	70	170
Apr. 18, 1962	0745	58	270				
July 10, 1962	1600	78	145				
Aug. 15, 1962	1200	77	97.5				
Aug. 25, 1962	----	74	82.0				
Sept. 10, 1962	1615	70	465				
Oct. 11, 1962	1000	70	403				
Nov. 8, 1962	1345	51	229				
Dec. 7, 1962	0915	44	181				
Dec. 16, 1962	1110	38	165				

ARKANSAS RIVER BASIN

7-1885. Lost Creek at Seneca, Mo.

Location.--Lat 36°50'28", long 94°36'30", in SE¼SE¼ sec.35, T.25 N., R.34 W., at Seneca Street Bridge, 2 blocks east of Main Street (State Highway 43), in Seneca, Newton County, half a mile upstream from Little Lost Creek and 9½ miles upstream from mouth.

Drainage area.--42.0 sq mi.

Discharge records available.--October 1948 to September 1959 (discontinued). Discharge measurements only October 1959 to September 1969.

Maximum temperature measured.--82° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 12, 1967	1355	71	4.51				
Oct. 12, 1967	1030	53	11.8				
Dec. 20, 1967	1215	53	40.9				
Feb. 14, 1968	1230	44	50.0				
Apr. 17, 1968	1130	66	34.8				
June 25, 1968	1440	66	613				
Aug. 15, 1968	1420	73	23.5				
Dec. 6, 1968	1100	47	52.1				
Feb. 6, 1969	1400	53	63.9				
Apr. 22, 1969	1250	62	56.2				
June 11, 1969	1445	77	15.6				
Aug. 12, 1969	1530	82	7.45				

WHITE RIVER BASIN

7-1888.2 Little Sugar Creek at Caverna, Mo.

Location.--Lat 36°30'10", long 94°16'30", McDonald County, at bridge on U. S. Highway 71, 0.5 mile north of Caverna.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--81° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 10, 1967	1545	81	----				
Sept. 12, 1967	1020	71	2.72				
Nov. 15, 1967	1610	57	35.6				
Dec. 20, 1967	1600	56	126				
Jan. 18, 1968	1430	45	17.7				
Feb. 14, 1968	1700	46	108				
Mar. 21, 1968	1130	46	----				
Apr. 17, 1968	1600	66	138				
May 16, 1968	1645	64	176				
June 25, 1968	1100	66	175				
July 17, 1968	1600	75	73.4				
Aug. 15, 1968	1030	71	54.7				
Sept. 25, 1968	1020	64	66.7				
Nov. 13, 1968	1030	50	75.0				
Dec. 6, 1968	1430	51	171				
Jan. 7, 1969	1030	45	139				
Feb. 6, 1969	0940	50	246				
Mar. 3, 1969	1250	49	151				
Apr. 22, 1969	0930	58	152				
May 15, 1969	1055	61	110				
June 11, 1969	1020	66	58.2				
July 8, 1969	1030	73	66.8				
Aug. 12, 1969	1030	73	17.0				
Sept. 5, 1969	1400	76	18.0				

ARKANSAS RIVER BASIN

7-1888.5 Elk River at Pineville, Mo.

Location.--SW¼ sec.34, T.22 N., R.32 W., at bridge on U. S. Highway 71 at south city limits of Pineville, McDonald County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--83° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 7, 1947	1210	83	26.7				
Oct. 9, 1948	0815	59	74.4				
Aug. 20, 1962	1435	83	7.4				
Nov. 29, 1962	1540	54	204				
Sept. 5, 1963	1110	81	14.2				
Oct. 4, 1963	1025	69	12.4				
Nov. 6, 1963	1210	60	15.2				
Oct. 20, 1964	0810	57	32.6				
Mar. 4, 1965	1320	68	277				
Sept. 6, 1967	1635	72	10.0				
Oct. 22, 1968	1325	64	111				

ARKANSAS RIVER BASIN

7-1888.7 Indian Creek at Anderson, Mo.

Location.--NE¼ sec.18, T.22 N., R.32 W., at bridge on State Highway 76, 3/4 mile southeast of Anderson, McDonald County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--80° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 9, 1945	0925	73	84.7				
Oct. 9, 1948	0835	60	56.3				
May 21, 1962	1730	61	86.2				
May 22, 1962	0700	72	205				
Aug. 20, 1962	1800	80	39.5				
Nov. 29, 1962	1250	52	110				
Sept. 5, 1963	0905	77	22.8				
Oct. 4, 1963	0835	65	20.9				
Nov. 6, 1963	1105	57	23.7				
Oct. 20, 1964	0900	53	22.5				
Feb. 3, 1965	1200	38	48.2				
May 4, 1965	1430	70	142				
Sept. 6, 1967	1530	72	29.7				
Oct. 22, 1968	1210	65	52.0				

ARKANSAS RIVER BASIN

7-1890. Elk River near Tiff City, Mo.

Location.--Lat 36°38', long 94°35', in NE¼ sec.22, T.22 N., R.34 W., on downstream side of right pier of bridge on State Highway 43, 0.8 mile downstream from Blackfoot Branch, 2.8 miles upstream from Buffalo Creek, 3 miles southeast of Tiff City, and at mile 15.8.

Drainage area.--872 sq mi.

Discharge records available.--October 1939 to September 1969.

Maximum temperature measured.--87° Fahrenheit.

Temperature (°F) of water, water year October 1947 to September 1948

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October.......	69	72	74	77	77	72	72	75	71	75	74	74	74	74	69	68	71	74	70	71	71	72	71	70	68	66	63	59	65	60	63
November......	60	61	62	61	62	60	54	56	55	55	53	53	54	53	53	50	51	51	—	55	54	50	51	47	46	47	51	52	54	46	—
December......	50	53	56	55	49	51	56	46	49	46	48	40	47	46	45	37	45	44	47	48	46	47	44	41	42	42	39	39	48	46	43
January.......	38	39	42	44	40	45	40	48	48	46	46	45	40	38	43	37	37	38	36	37	38	40	35	35	38	35	33	33	35	36	36
February......	37	35	38	40	35	38	40	37	36	37	39	34	38	41	42	41	44	50	51	45	44	46	46	48	47	49	52	50	52	—	--
March.........	50	48	47	48	46	46	47	45	47	—	40	42	42	49	54	53	53	54	54	54	58	54	55	58	59	—	52	52	55	56	56
April.........	58	59	60	61	62	64	66	63	63	62	62	60	58	62	57	—	66	66	67	65	63	65	69	70	69	70	65	78	76	66	—
May...........	69	72	65	66	65	66	62	68	68	63	62	63	64	62	68	70	70	65	69	70	73	73	74	70	64	67	66	—	—	—	—
June..........	—	—	—	80	84	81	86	84	82	83	79	83	83	81	81	74	82	82	81	82	72	74	—	69	72	72	72	70	72	69	—
July	75	74	73	--	74	76	72	82	70	76	80	75	82	82	77	77	78	72	72	72	75	76	78	80	80	77	79	80	80	80	79
August........	80	74	78	72	72	74	75	78	--	80	82	77	75	71	71	78	75	74	78	74	74	82	82	82	79	78	76	—	76	80	80
September.....	78	77	76	—	76	81	80	73	72	81	76	75	80	79	81	80	—	—	79	78	81	80	78	70	72	69	67	67	69	72	—

Temperature (°F) of water, water year October 1948 to September 1949

DAY

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
October.......	71	71	71	70	69	69	63	65	68	64	66	67	67	67	66	65	58	63	63	62	60	58	62	63	62	63	58	63	64	63	66
November......	63	61	64	63	63	57	51	57	--	57	55	53	58	55	54	59	58	59	48	53	51	49	48	47	54	50	49	48	45	48	—
December......	43	47	45	47	48	48	43	43	43	41	50	52	45	54	60	49	49	49	49	47	--	48	47	45	45	43	43	46	43	44	42
January.......	42	49	49	45	43	41	46	45	45	44	43	43	45	48	52	47	43	42	41	—	44	45	49	47	43	44	45	42	41	40	40
February......	44	46	45	46	49	45	48	46	49	46	45	50	48	45	46	48	42	49	48	52	50	49	50	50	50	50	50	49	—	--	--
March.........	46	46	46	52	52	50	53	53	50	48	51	48	51	48	50	48	49	46	49	50	52	50	53	54	54	55	56	54	55	58	53
April.........	50	51	50	52	52	56	62	61	59	54	53	52	60	—	52	58	59	56	56	58	61	60	67	70	68	68	66	61	62	64	--
May...........	63	62	63	60	66	66	65	66	64	62	63	64	66	66	66	68	71	68	68	66	66	65	67	66	64	66	68	66	68	69	72
June..........	71	73	70	69	74	72	72	70	70	71	69	70	70	70	69	68	70	71	70	74	77	79	78	75	76	77	80	77	76	79	--
July..........	84	85	85	84	84	83	81	78	76	--	78	74	73	—	74	76	79	75	82	81	84	83	83	84	83	83	86	84	84	82	84
August........	84	82	82	83	80	83	82	82	83	85	86	86	85	83	82	84	87	84	84	78	81	80	81	82	77	82	78	80	81	81	79
September......	72	78	74	75	80	80	75	75	77	—	--	—	—	—	—	—	—	—	68	71	71	72	69	68	68	—	70	69	68	70	--

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Sept. 19, 1951	1615	73	270	Aug. 12, 1953	1025	80	45.7
Dec. 28, 1951	1105	41	442	Sept. 14, 1953	----	73	33.3
Feb. 5, 1952	1115	54	2,220	Oct. 7, 1953	1010	64	51.1
Mar. 10, 1952	1430	52	2,880	Oct. 21, 1953	----	70	38.3
Apr. 15, 1952	1230	52	2,720	Dec. 7, 1953	----	48	86.4
Apr. 28, 1952	1240	64	784	Jan. 6, 1954	----	42	51.4
June 12, 1952	1240	82	218	Feb. 3, 1954	----	43	77.4
June 25, 1952	0900	81	139	Mar. 9, 1954	----	48	59.9
July 11, 1952	1045	81	104	May 10, 1954	----	60	565
Aug. 12, 1952	1235	81	131	Aug. 10, 1954	0950	82	15.5
Aug. 23, 1952	1150	82	4,580	Oct. 5, 1954	0910	75	120
Sept. 9, 1952	1010	73	195	Dec. 12, 1954	0920	49	81.2
Oct. 1, 1952	1030	52	---	Feb. 7, 1955	0910	40	463
Oct. 2, 1952	1400	58	76.1	Mar. 1, 1955	1100	55	724
Nov. 12, 1952	1155	53	97.1	Apr. 4, 1955	0915	58	698
Jan. 27, 1953	1010	45	275	May 4, 1955	----	68	246
Feb. 10, 1953	1215	50	151	June 8, 1955	0945	69	508
Mar. 17, 1953	1015	54	12,000	July 6, 1955	1038	76	815
Apr. 7, 1953	1310	54	2,120	Aug. 2, 1955	0845	81	156
May 19, 1953	1045	65	1,220	Feb. 27, 1956	0850	49	112
June 2, 1953	0945	76	282	Apr. 3, 1956	0900	60	67.1
June 29, 1953	0900	78	---	May 2, 1956	1000	60	586
July 28, 1953	1100	84	74.6	May 7, 1957	1015	62	995

ARKANSAS RIVER BASIN

Temperature and Discharge of Elk River near Tiff City, Mo.—Continued

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Aug. 21, 1957	0915	78	199				
Nov. 4, 1957	0815	56	100				
Dec. 2, 1957	1200	45	155				
May 27, 1958	1015	70	769				
June 17, 1958	1055	75	322				
Aug. 11, 1958	1315	78	572				
Nov. 12, 1959	1230	59	688				
Dec. 9, 1959	1605	53	211				
Feb. 12, 1960	1525	45	672				
Mar. 14, 1960	1440	44	1,290				
Apr. 7, 1960	1310	59	401				
May 13, 1960	1140	67	2,130				
May 18, 1960	0800	—	401				
June 14, 1960	1145	70	610				
July 14, 1960	0940	79	163				
Aug. 14, 1960	1515	83	208				
Sept. 9, 1960	1015	70	97.0				
Oct. 5, 1960	2030	73	72.0				
Nov. 25, 1960	1250	55	135				
Jan. 13, 1961	1410	67	142				
Jan. 25, 1961	1625	36	118				
Mar. 13, 1961	1130	55	899				
Apr. 13, 1961	1610	65	787				
Nov. 2, 1965	1445	63	86.0				
Dec. 7, 1965	——	49	98.0				
Jan. 10, 1966	1330	51	665				
Feb. 13, 1966	1500	49	2,580				
Mar. 13, 1966	1350	57	854				
Apr. 17, 1966	1220	68	251				
June 1, 1966	1500	76	383				
June 27, 1966	1500	85	142				
July 27, 1966	1800	87	100				
Aug. 26, 1966	1100	77	134				
Sept. 28, 1966	1820	71	65.0				
Oct. 27, 1966	1715	64	61.0				
Nov. 17, 1966	1130	59	90.0				
Dec. 14, 1966	——	46	81.0				
Jan. 12, 1967	1320	44	138				
Feb. 15, 1967	1715	46	177				
Mar. 15, 1967	1600	54	218				
Apr 12, 1967	1700	61	228				
May 18, 1967	1445	70	366				
June 14, 1967	1500	82	322				
July 12, 1967	1715	79	295				
Aug. 10, 1967	1430	80	87.0				
Sept. 12, 1967	1200	72	35.0				
Oct. 12, 1967	1430	62	228				
Nov. 15, 1967	1400	55	380				
Dec. 20, 1967	1345	52	1,100				
Jan. 18, 1968	1230	42	228				
Feb. 14, 1968	1430	42	830				
Mar. 21, 1968	0945	44	8,040				
Apr. 17, 1968	1320	64	840				
May 16, 1968	1330	66	860				
June 25, 1968	1315	72	515				
July 17, 1968	1230	77	392				
Aug. 15, 1968	1315	77	550				
Sept. 25, 1968	1245	69	136				
Oct. 22, 1968	1300	59	174				
Nov. 13, 1968	1245	50	640				
Dec. 6, 1968	1245	48	1,320				
Jan. 7, 1969	1320	44	1,120				
Feb. 6, 1969	1210	48	1,710				
Mar. 3, 1969	1430	48	1,100				
Apr. 22, 1969	1130	60	1,230				
May 15, 1969	1215	66	665				
June 11, 1969	1215	73	408				
July 8, 1969	1300	80	570				
Aug. 12, 1969	1300	80	150				
Sept. 15, 1969	1130	76	150				

ARKANSAS RIVER BASIN

7-1891. Buffalo Creek at Tiff City, Mo.

Location.--SE¼ sec.4, T.22 N., R.34 W., at bridge on State Highway 76, 1/2 mile east of Tiff City, McDonald County.

Drainage area.--Not determined.

Discharge records available.--Discharge measurements only.

Maximum temperature measured.--77° Fahrenheit.

Temperature and Discharge

Date	Time	Water Temp. (°F)	Discharge (cfs)	Date	Time	Water Temp. (°F)	Discharge (cfs)
Feb. 24, 1954	1125	49	6.92				
May 22, 1962	0850	70	16.5				
Aug. 20, 1962	1655	77	.94				
Nov. 29, 1962	1410	55	32.0				
Feb. 3, 1965	1030	42	14.1				
May 5, 1965	0915	59	35.9				
Aug. 10, 1967	1345	73	----				
Oct. 12, 1967	1245	63	21.2				
Nov. 15, 1967	1230	55	43.3				
Jan. 18, 1968	1000	46	22.5				
Mar. 20, 1968	1530	46	----				
May 16, 1968	1200	60	42.6				
July 17, 1968	1100	70	27.9				
Sept. 25, 1968	1345	68	3.15				
Nov. 13, 1968	1445	54	48.4				
Jan. 7, 1969	1435	49	88.9				
Mar. 3, 1969	1650	52	90.8				
May 15, 1969	1315	62	38.9				
July 8, 1969	1345	74	53.1				
Sept. 5, 1969	1020	70	3.25				

☆ U.S. GOVERNMENT PRINTING OFFICE: 1971--760334/28/Region No. 6